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THE IMPORTANT BIRD AREAS PROGRAMME IN INDIA

by

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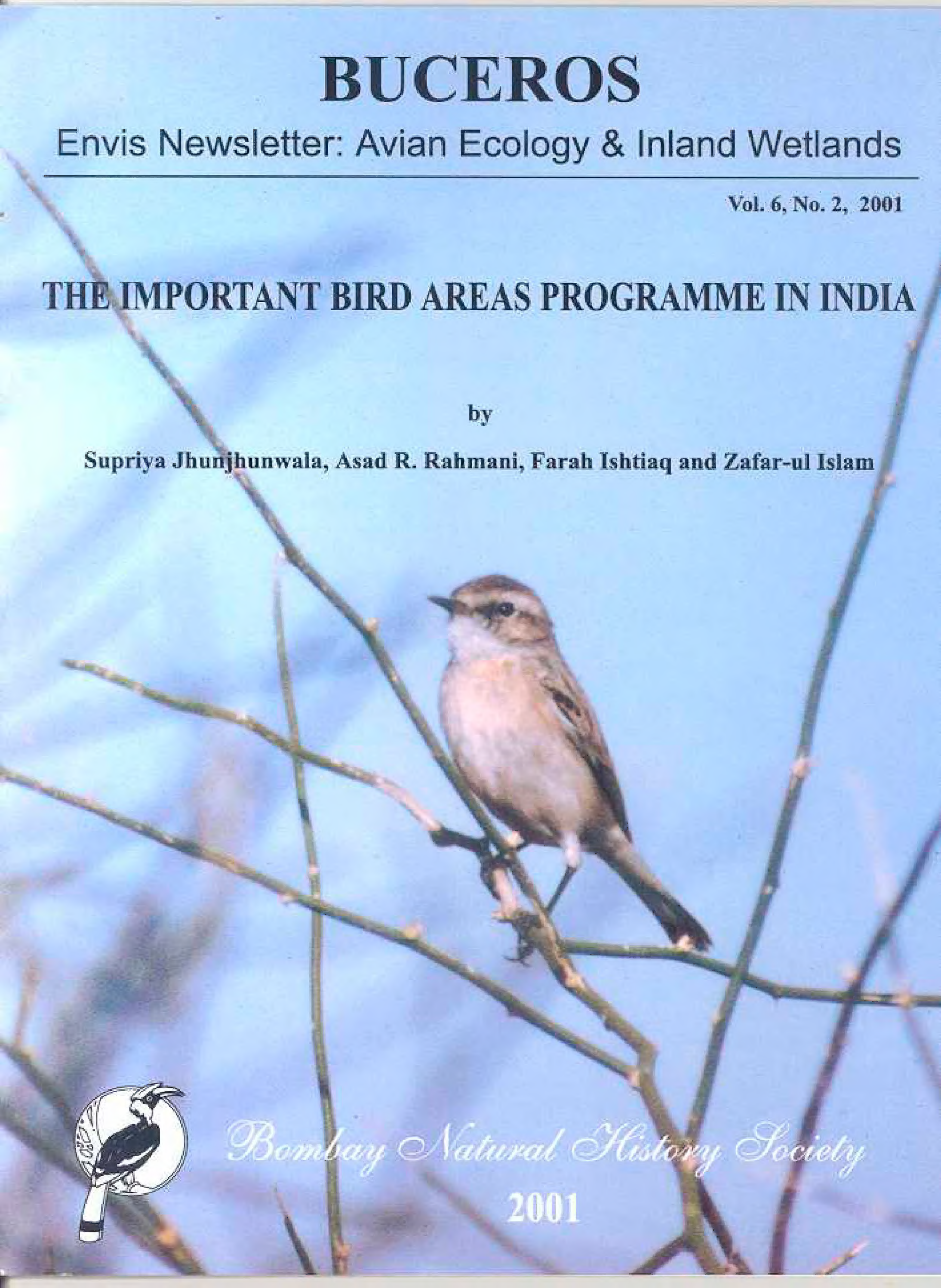

Bombay Natural History Society

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ENVIS

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The ENVIS Centre at the Bombay Natural History Society was set up in June 1996 to serve as an ENVIS Centre for *Avian Ecology* and *Inland Wetlands*.

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Foreword

India has the distinction of being one of the world's most biodiverse regions. However, anthropogenic pressures have resulted in a rapid loss of its biodiversity. Only just over 4.6% of its landmass is under the protected areas network, and these too are fraught with pressures that are causing their deterioration. Our population of *Homo sapiens* has gained the dubious distinction of touching the one billion mark and is still growing incessantly, devouring natural habitats and wildlife in the process.

Consumption patterns have changed and levels have increased dramatically and we have increased the already immense pressure on our natural resources many fold. As habitats succumb to all the above factors, many more species join the rapidly growing list of globally threatened species in their steady march to extinction.

Urgent efforts are needed to stem this loss. The Important Bird Areas (IBA) programme is one such effort. Being a site-based approach it aims to identify, document and advocate the protection of a network of sites crucial to the long-term conservation of wild bird species. The IBA programme also involves networking between different organisations and individual partners of the Indian Bird Conservation Network and its partners. It has provided and will continue to provide capacity building support to other organisations involved in conservation to enhance their effectiveness. The programme is just one of the many tools needed to identify crucial sites for conservation and to stem the rapid loss of biodiversity.

This special issue of the ENVIS Bulletin is an attempt to create widespread awareness about IBAs and encourage individuals and institutions to participate in the programme. The IBA site list is regularly updated and we hope that this Bulletin will encourage readers to identify and advocate the protection of IBAs in their areas.

Asad R. Rahmani
Director, BNHS

THE IMPORTANT BIRD AREAS (IBA) PROGRAMME

Principal Investigator: Asad. R. Rahmani

Supriya Jhunjhunwala, Farah Ishtiaq, Zafar-ul Islam

INTRODUCTION

India ranks amongst one of the most biodiverse countries in the world. Currently 1220 species of breeding, staging and wintering birds, occupying a wide array of natural, semi natural and urban habitats are known from India (Manakadan & Pittie 2001).

Conservation has always been a part of India's tradition. A wide network of 75 national parks, 447 wildlife sanctuaries, 22 Project Tiger areas and 8 biosphere reserves have been set aside to conserve its wildlife, covering about 4.6% of the country's land area. Besides this, there are vast areas that do not have legal status as national parks or sanctuaries, but are home to a large proportion of India's biodiversity.

The impact of people and unsustainable development practices is, however, seen on these areas, so much so that many habitats and animal and plant species which depend on them have become severely threatened and are disappearing rapidly.

A significant proportion of bird species can be effectively conserved by the protection of key sites, either as officially protected areas (national parks and sanctuaries) or through the promotion of sustainable land use practices.

Extinction rates far higher than normal background rates are resulting in rapid loss of biodiversity. By losing species we are losing potential contributors to future food and medicine and valuable links in natural and biological cycles. Although extinction is a natural process, fossil records show that on an average only one bird species dies out every 100 years. During the last 200 years the rate of extinction has been at least 40 times greater than this. One bird in eight could join the extinction list in the next century. The main causes of extinction are habitat loss and habitat degradation. Changes in land use patterns have had a detrimental impact on habitats, which have been fragmented and reduced in extent and diversity. This has resulted in a marked reduction in abundance and range of several bird species (BirdLife International 2001).

Seventy-nine Indian bird species are globally threatened with extinction. Of these 9 are listed as Critical, 10 species as Endangered, 57 are Vulnerable, 2 are conservation dependent and 1 is data deficient. A further 52 are classified as Near Threatened (BirdLife International 2001). A large proportion of the rest of the bird species in India are rapidly declining and are in urgent need of conservation action.

THE IMPORTANT BIRD AREAS PROGRAMME

An effective way to save birds is to save the places where they live; the identification of such representative habitats is carried out through the Important Bird Areas Programme of BirdLife International. BirdLife International is a partnership of organisations working for the conservation of birds and their habitats and through these the diversity of all life. The Bombay Natural History Society [BNHS] is the BirdLife Partner Designate in India and is coordinating the programme in India. The Indian IBA Programme is being funded by the Royal Society for the Protection of Birds [RSPB], the BirdLife Partner in the United Kingdom.

IBAs are sites of international significance for bird conservation. They are part of a wider, integrated approach to conservation that embraces site, species and habitat protection and will be used to reinforce the existing protected areas network. They will contribute to the conservation of biodiversity, as sites which are rich in birds are also likely to be rich in other species.

The IBA Programme gathers, uses and disseminates information on key bird species and the sites that are important for them, through active participation of people. The IBA programme also tries to involve communities living in and around IBAs in their conservation.

Aims

The IBA Programme aims to identify, document and advocate the protection and management of a network of sites that are important for the long-term viability of naturally occurring bird populations across the geographic range of those bird species for which a site-based approach is appropriate.

The IBA programme is producing inventories of internationally recognized sites vital for the conservation of birds. It will identify, document and protect a network of sites which covers all habitats and species. Given that

PIC: ANISH ANDHERIA

Sanjay Gandhi National Park

IBAs protect and provide water and other natural resources birds are good indicators of overall biological diversity, most IBAs will also be important for other animals and plants. The IBA programme aims to identify and promote the protection of networks of key sites for the conservation of birds and other biodiversity in all regions of India.

The aims of the IBA Programme include to:

- *Contribute in the development of national conservation strategies, highlight sites which are threatened or inadequately protected*
- *Help build regional and national networks of ornithologists and conservationists.*
- *Guide the work of international and national NGOs*
- *Influence global conventions, e.g. Biodiversity, Ramsar; etc.*

The Indian IBA programme will also try to contribute in:

- *Help identify high biodiversity areas*
- *Help identify future priorities for birds and biodiversity conservation action*
- *Provide decision makers with high quality biodiversity information for sustainable land and resource use*
- *Assist government in the implementation of international agreements such as the Convention on Biological Diversity*
- *Provide material for education and training*
- *Contribute to the National Biodiversity Strategy and Action Plan.*

Site based approach

The Important Bird Areas (IBA) Programme of BirdLife International is a worldwide initiative aimed at identifying and protecting a network of critical sites for the conservation of birds. The IBA programme is a site-based approach, which identifies sites of international importance for the conservation of birds and other biodiversity and collates and disseminates key information. Information availability of the importance and location of such sites is fundamental to the success of a site based conservation strategy.

Birds are one of the best-researched taxa in India and a fairly reliable indicator of biodiversity loss. Given that birds are good indicators of overall biological diversity, most IBAs will also be important for other animals and plants. A significant proportion of birds (and other animal and plant species) can be effectively conserved by the protection of key sites, either as official protected areas (national parks and reserves) with necessary and appropriate management, and or through the promotion of sustainable land-use practices (Mallari *et al.* 2001).

State Co-ordinators meeting
Networking is essential for IBAs

THE SCOPE OF THE IBA PROGRAMME

PIC: PERWEZ IQUBAL

Swamp Francolin ***Francolinus gularis***
Site based approach may not be appropriate for widely dispersed bird species

The IBA Programme incorporates the conservation of species and the sites essential for their conservation. It therefore covers the entire country and a wide range of habitats.

Species

The programme not only covers the 79 globally Threatened birds in India (comprising of Critical Endangered, Vulnerable and Data Deficient and Conservation Dependent species) but also species that are endemic or have restricted ranges, congregatory birds and assemblages of species that are typical to a habitat or biome.

Habitats

As the programme covers a wide array of bird species, it also ranges across various habitats such as wetlands, islands, coastal areas, deserts, forests, grasslands and agricultural ecosystems.

Geographic range

The BNHS organised 9 regional workshops to identify IBAs for every state and union territory of India. With the exception of Daman and Diu, and Chandigarh, IBAs have been identified for all the states and union territories of India, including those like Meghalaya for which there was very little data.

Limitations of the IBA approach

- The IBA approach works only for those species for which a site-based approach is appropriate. Bird species with highly dispersed or nomadic distributions may not be protected through this approach. Some bird species are not well protected by the IBA approach (such as large raptors, cranes and bustards, which are dispersed at low densities across wide areas).
- For others, the IBAs might be appropriate only across some of their ranges or for parts of their life cycles,

(e.g. colonial nesting species that disperse extensively during the non-breeding season) (Barnes 1998).

- Any strategy for the long-term protection of biotic diversity should encompass evolutionary and biogeographic considerations. The IBA programme attempts to take this into account by selecting a network of sites that are spread through most habitats and in different areas of the species distributions. However, sub-specific variation was not taken into account. Any future assessment should attempt to include sites where different morphs and subspecies (particularly endemic and restricted range subspecies) are located (Barnes 1998).
- The IBA programme is just one approach to bird conservation. It is not the whole and the only answer. The IBA criteria are fairly stringent and many sites that are of undoubted local, provincial and national importance fail to qualify as IBAs. This does not mean that they are not important for conservation; on the contrary these sites often fulfill vital conservation roles at local scales. It must be emphasised that sites not designated as IBAs are not dispensable and their role in a wider land-use conservation strategy may be as vitally important as that of any IBA (Barnes 1998).

Methodology

IBAs are being identified using four standard global criteria, which cover sites that regularly hold significant populations of threatened birds listed as red data book (RDB) species; endemic birds i.e. birds with restricted ranges; bird communities consisting of species of birds that are more or less typical to certain biomes and sites where large congregations of birds gather. These criteria were applied through an exhaustive literature review and a process of consultation through workshops and meetings. Where gaps in information were found, surveys were commissioned to gather data.

IBA Criteria

IBA criteria cover sites that are internationally important for the 79 globally threatened species in India (bird species that fall in the Critical, Endangered, Vulnerable, Conservation Dependent or Data Deficient categories of the Asian Red Data Book, BirdLife International 2001). Near Threatened species have not been included in this analysis.

Sites were also selected for restricted range species or species unique to a small region. India has a total of 74 restricted range species of which 38 are confined to the geographic boundaries of the country, and 23 are globally threatened (Stattersfield *et al.* 1998).

Sites that support a species assemblage that are highly representative of a distinct biome and sites for migratory and terrestrial species which congregate in high numbers (Rose and Scott 1994).

The IBA criteria are simple and robust enough to be applied uniformly and cost effectively (Barnes 1998). The criteria ensure that the sites selected as IBAs have true significance for the international conservation of bird populations, and provide a common currency that all IBAs adhere to. This creates consistency and enables comparability between sites at national, continental and global levels.

It is crucial to understand why a site is important, and to do this it is necessary to examine its international significance in terms of the presence and abundance of species that occur there in different seasons. The status and nature of these species also need to be taken into account. Threat status, breeding/ non-breeding status, vulnerability through congregations and the proportion of the total population of each species that occurs at the site, are all important factors in determining a site's importance (Heath & Evans 2000).

Important Bird Areas Global Categories and Criteria

(For a Summary of Important Bird Areas Global Categories and Criteria please see Appendix I.)

A1. Globally threatened species:

Criterion: The site regularly holds significant numbers of a globally threatened species, or other species of global conservation concern.

This category refers to species classified as globally threatened with extinction (critical, endangered or vulnerable), conservation dependent or data deficient according to the new IUCN criteria for threatened status. The site qualifies if it is known, estimated or thought to hold a population of a species categorised as Critical, Endangered, Vulnerable, Conservation Dependent, and/or Data Deficient.

(For a list of threatened bird species in India that qualify for this Criterion please see Appendix II.)

A2. Restricted-range species:

Criterion: The site is known or thought to hold a significant component of a group of species whose breeding distributions define an Endemic Bird Area (EBA) or Secondary Area (SA).

Restricted range species are those that have a total world range of less than 50,000 square kilometres. An area where the ranges of two or more restricted range species overlap is known as an endemic bird area. Analysis by BirdLife International has shown that a very high proportion of the world's endemic birds occur in a small proportion of the land area. The EBAs defined by these species are important hot spots for the conservation of bird diversity (Stattersfield *et al.* 1998).

An IBA may be chosen because it contains high proportion of the list of restricted range species for a particular EBA, or because it contains a restricted range species that has not been included elsewhere. The aim is to define IBAs so that restricted-range species are present in significant numbers in at least one site.

Endemic Bird Areas of India:

1. Western Ghats
2. Andaman Islands
3. Nicobar Islands
4. Western Himalayas
5. Eastern Himalayas
6. Assam Plains
7. Southern Tibet
   (Though the area primarily lies in Tibet, portions of it also extend into India)

Secondary Areas in India:

1. Eastern Andhra Pradesh
2. Southern Deccan plateau
3. Indus plains
4. Central Indian Forests
5. North Myanmar lowlands (mainly in Myanmar but also includes lowlands of India)

(For a list of Restricted range bird species in India that qualify for this Criteron please see Appendix III.)

A3. Biome-restricted assemblage:

Criterion: The site is known or thought to hold a significant component of the group of species whose distributions are largely or wholly confined to one biome.

A biome may be defined *as a major regional ecological community characterised by distinctive animal and plant species.* The site also has to form one of a set selected to ensure that, as far as possible, all species restricted to a biome are adequately represented.

This category applies to groups of species with largely shared distributions which occur mostly or wholly within or a part of a particular biome and are therefore of global importance.

A site selected for this criterion has to form one of a set of sites selected to ensure that as far as possible all species and habitats characteristic of a biome are adequately represented.

The major biomes in India as classified by BirdLife International are as follows:

BIOME 05:
EURASIAN HIGH MONTANE (ALPINE AND TIBETAN)
BIOME 07:
SINO-HIMALAYAN TEMPERATE FOREST
BIOME 08:
SINO-HIMALAYAN SUBTROPICAL FOREST
BIOME 09:
INDOCHINESE TROPICAL MOIST FOREST
BIOME 10:
INDIAN PENINSULA TROPICAL MOIST FOREST
BIOME 11:
INDO-MALAYAN TROPICAL DRY ZONE
BIOME 12:
INDO-GANGETIC PLAINS
BIOME 13:
SAHARO-SINDIAN DESERT

(For a list of biome wise distribution of bird species that qualify for this Criterion for each biome please see Appendix IV.)

A4. Congregations:

Criteria: A site may qualify on any one of the four criteria listed below:

i). Site known or thought to hold, on a regular basis, ≥ 1% of a biogeographic population of a congregatory waterbird species.

This applies to waterfowl species as defined by Rose and Scott (1994). Thresholds are generated in some instances by combining flyway populations within a biogeographic region, but for others lacking quantitative data, thresholds are set regionally or inter-regionally, as appropriate. In such cases, thresholds will be taken as estimates of 1% of the biogeographic population. (*For a list of bird species and the thresholds that qualify for these Criteria please see Appendix VI*)

ii). Site known or thought to hold, on a regular basis, ≥ 1% of the global population of a congregatory seabird or terrestrial species.

This includes those seabird species not covered by Rose and Scott (1994). Where quantitative data are lacking, numerical thresholds for each species are set regionally or inter-regionally, as appropriate. In such cases, thresholds will be taken as estimates of 1% of global population.

iii). Site known or thought to hold, on a regular basis, ≥ 20,000 water birds or ≥ 10,000 pairs of seabirds of one or more species.

This is the Ramsar criterion for waterbirds. The use of this criterion is discouraged wherever data is good enough to permit the use of (i) or (ii).

iv). Site known or thought to exceed thresholds set for migratory species at bottleneck sites.

Thresholds are set regionally or inter-regionally, as appropriate. This category also covers sites over which migrants congregate e.g. before gaining height in thermals. Although it is the airspace here that is important, conservation of the land beneath it may be necessary to protect it from threats such as hunting and construction.

Identification of the network of sites through the rigorous application of standard and quantitative

IBA workshop

Melghat Tiger Reserve
The fate of IBAs and the communities living in and around them are irrevocably linked

ornithological criteria assures their international importance. The global standardisation of the criteria facilitates comparisons between sites at local, national, regional and global levels. These criteria are compatible with those used to designate wetlands of international importance under the Ramsar Convention and Special Protection areas under the EC Birds Directive (Heath and Evans 2000).

Process of IBA identification and Selection.

Literature Survey

The foundation of this project lies in the data on bird numbers and distribution, generated through the numerous field surveys and research programmes carried out in India during the last few decades. Exhaustive literature surveys were undertaken and information was gathered from various sources, including national environmental organizations, individuals, scientists, protected areas staff, natural history museums, research institutions, universities and publications. Unpublished material held by research and conservation organizations were also analysed during this study. A draft list of 3000 sites was drawn up at the end of this process. This list included records of vagrancy and historical occurrence of bird species, hence it had to be filtered.

Workshops and consultation

Researchers, ornithologists, local forest officials, and bird enthusiasts were consulted through workshops conducted by BNHS and Indian Bird Conservation Network partners, meetings and correspondence, to identify a list of IBAs throughout the country. Emphasis was given to the participation of governmental and non-governmental conservation bodies and academic institutions. Regional workshops were held in which contributions were made by a vast network of ornithologists, birdwatchers, personnel working for the forest departments, and conservation experts across India and the world. The Bombay Natural History Society and state coordinators of the IBCN have been involved in collating and assessing the data for each state. The participants reviewed the draft list and added and deleted sites based on current information and possibility of occurrence of species at sites. The workshop list identified about 1,000 sites.

Identification of gaps

There were lacunae in the information from several areas in India and for certain species. Sites could not be identified for some species and for states like Meghalaya, Mizoram and Nagaland and several districts from other states. This was mainly due to lack of data from these areas.

Surveys for sites and species

Surveys were then commissioned and successfully executed for data deficient species and areas in several states like Meghalaya, Mizoram, Nagaland, Maharashtra, Kerala, Orissa, and Bihar.

Capacity building training workshops

Some areas remained unexplored largely due to the lack of skilled manpower to execute the surveys. The Indian Bird Conservation Network conducted several training workshops in bird census techniques. A manual for bird census was also developed and distributed.

Site prioritisation

Three hundred and thirty nine sites that are confirmed IBAs have been chosen from the workshop list. The number of sites in this list is increasing as new information keeps coming in. These sites are identified on the basis of bird numbers and species complements that they hold, and are selected such that, taken together, they form a network throughout the species biogeographic distributions. This network may be considered as a minimum essential to ensure the survival of these species across their ranges, should there occur a net loss of remaining habitat elsewhere through human or other modification. Therefore, the consequences of the loss of any one of these sites may be disproportionately large. The continued ecological integrity of these sites will be decisive in maintaining and conserving birds for which a site based approach is appropriate. Legal protection, management and monitoring of these crucial sites will be important targets for action, and many but not all bird species may be effectively conserved by these means. Patterns of bird distribution are such that, in most cases, it is possible to select sites that support many species (Heath and Evans 2000).

Circulation of Draft lists

Draft lists are continuously circulated to experts for comments and updating information. Several additional sites are being identified as IBAs, as new information comes.

IBA Inventories

The Asian IBA Inventory is scheduled for publication in 2002, followed by the Indian IBA inventory in 2003. State IBA inventories for each state in India are also on the anvil. These inventories are intended to provide comprehensive information on IBA sites and species, and to be used as an advocacy tool for site and species conservation, to enable informed decision making.

Advocacy, awareness and involvement of local communities

The IBA process does not stop at identification and documentation of sites. It encourages widespread ownership of the concept, especially at the grass roots level. The IBA project also involves local communities living in and around IBA sites.

Important Bird Areas and the National Biodiversity Strategy and Action Plan (NBSAP)

Both the National Biodiversity Strategy and Action Plan and IBA are complementary methods with biodiversity conservation as their common goal. The IBA relates to several aspects and components of the NBSAP and is featuring as a sub-thematic review note in the NBSAP.

Status of IBAs

IBAs are the first comprehensive study in which sites have been identified for bird conservation. As mentioned above 335 IBAs have been identified so far. This list however is dynamic and not a fixed list of sites. It is anticipated that several new IBAs will be identified.

Around 90% of IBAs in India are important for one or more of the 79 globally threatened species in India and 47% for the 74 restricted range species found in India. Almost all IBAs fall under at least one biome and hold some of the 374 bird species that fall in the biome criterion.

IBAs are also important for species that congregate in large numbers, such as congregatory terrestrial birds, wintering and passage waterbirds and breeding seabirds. Almost 17% of IBAs have been identified for these species *(For a list of IBAs see Appendix VII).*

International recognition

IBAs are recognised by intergovernmental bodies and international treaties such as the Biodiversity and Ramsar conventions. The Global Environment Facility recognises IBAs in their own strategies and action plans, while the European Union has used them as a basis for legal judgments (Heath and Evans 2000).

Some International conventions and programmes particularly relevant to sites and species are: The Convention on Wetlands of International Importance, especially as Waterfowl Habitat (Ramsar Convention), Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention), Convention on Biological Diversity and UNESCO's Man & Biosphere Programme (Evans 1994).

The IBA criteria are compatible with the Ramsar criteria set for wetlands of international importance, yet only 16 IBAs are Ramsar sites. IBAs that qualify according to the Ramsar criteria should be considered for designation as Ramsar sites for the internationally important numbers of waterbirds that they hold.

IBAs not covered under the protected area network

The 92 National Parks and 480 wildlife sanctuaries in India respectively cover 35,357 sq. km and 1,15,451 sq. km, which constitutes 4.6% of the country's 32,87,213 sq. km of geographic area (Kutty and Kothari 2001). A high proportion of IBAs in India does not fall within the protected areas system. With 45% of the IBAs still unprotected, IBAs should be designated under national laws where appropriate. While legal measures may not always guarantee protection on the ground, they demonstrate to all sectors of the society and branches of government, the official recognition and importance of a site.

Bird species can be conserved by protection of sites, and by choosing the richest sites we can conserve many species at the same time, this also makes the best use of the scarce resources that are available for conservation. The Important Bird Areas (IBAs) process is about identifying and protecting those critical sites. IBAs form a network throughout a species' range. As habitats become more threatened, this network will become increasingly important to make sure that these species survive across their ranges. IBAs may include the best examples of the species' natural habitat

Places where a wide variety of birds are found tend to have a wide variety of other forms of life. Although IBAs are defined using birds, they help to protect other wildlife as well.

The sites are selected using scientific methods, but it is also a very practical approach. The existing protected area network will form the backbone of network of IBAs and new sites will be proposed to fill the gaps. Ideally, each site should be large enough to support self-sustaining populations of as many of species as possible for which it was identified. The IBA approach is only suitable for those bird species for which a site based approach is appropriate. This approach however, does not suit all birds. Thus the IBA Programme is only one tool in the armoury of conservation and needs to be combined with other conservation strategies in the wider environment.

Points to remember:

IBAs

- are places of international significance for the conservation of birds at the global, regional or sub-regional level,
- are practical tools for conservation,
- are chosen using standardised, agreed criteria applied with common sense,
- must, wherever possible, be large enough to support self-sustaining populations of those species for which they are important,
- are places which can be defined and distinguished from surrounding areas, and which are feasible to conserve,
- where possible, preferentially include, where appropriate, existing Protected Areas,
- are **not** appropriate for all bird species and, for some, are only appropriate in parts of their ranges,
- should form part of a wider, integrated approach to conservation that embraces sites, species and habitat protection.

BirdLife
INTERNATIONAL

The BirdLife International Partnership

The BirdLife International Partnership is a global alliance of conservation organisations working in more than 100 countries who together, are the leading authority on the status of birds, their habitats and issues and problems affecting bird life.

MISSION

The BirdLife International Partnership strives to conserve birds, their habitats and global biodiversity working with people towards sustainibility in the use of natural resources.

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RSPB THE ROYAL SOCIETY FOR THE PROTECTION OF BIRDS

The Royal Society for the Protection of Birds

RSPB is the United Kingdom partner of BirdLife International. RSPB is the leading NGO working for the conservation of birds in the UK.

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HOW YOU CAN PARTICIPATE

If you think that a site qualifies as an IBA please send in checklists and justification for which criteria it qualifies to, or for more details contact

Dr. Asad R. Rahmani (Principal Investigator)

Dr. Farah Ishtiaq (Network Coordinator, Indian Bird Conservation Network)
States: Arunachal Pradesh, Delhi, Tripura, West Bengal, Chattisgarh, Madhya Pradesh and Orissa.

Supriya Jhunjhunwala (IBA Ornithology Officer)
States: Andaman and Nicobar islands, Andhra Pradesh, Bihar, Goa, Gujarat, Jammu and Kashmir, Jharkand, Lakshadweep, Maharashtra, Manipur, Sikkim, Mizoram, Nagaland, Himachal Pradesh, Punjab and Haryana.

Zafar-ul Islam (IBA Information Officer)
States: Uttar Pradesh, Uttaranchal, Rajasthan, Assam, Meghalaya, Karnataka, Tamil Nadu and Kerala.

At the Bombay Natural History Society, Mumbai.

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APPENDIX 1

Important Bird Areas: summary of global categories and criteria

Category	Criterion	Notes
Globally threatened species	The site regularly holds significant numbers of a globally threatened species, or other species of global conservation concern.	The site qualifies if it is known or thought to hold a population of a species categorized as Critical, Endangered, Vulnerable, Conservation Dependent or Data Deficient.
Restricted-range species	The site is known or thought to hold a significant component of the restricted-range species whose breeding distributions define an Endemic Bird Area (EBA) or Secondary Area (SA).	The site also has to form one of a set selected to ensure that, as far as possible, all restricted-range species of an EBA or SA are present in significant numbers in at least one site and, preferably, more.
Biome-restricted assemblage	The site is known or thought to hold a significant component of the group of species whose distributions are largely or wholly confined to one biome.	The site also has to form one of a set selected to ensure that, as far as possible, all species and habitats characteristic of a biome are adequately represented.
Congregations	(i) The site is known or thought to hold, on a regular basis, ^{3} 1% of a biogeographic population of a congregatory waterbird species. *Or*	This applies to waterfowl species as defined by Rose and Scott (1997). Thresholds have been set by combining flyway populations within Asia. For species lacking quantitative data, thresholds were set by estimating 1% of the Asian biogeographic population.
	(ii) The site is known or thought to hold, on a regular basis, ^{3} 1% of the global population of a congregatory seabird or terrestrial species. *Or*	This includes those seabird species not covered by Rose and Scott (1997). Where quantitative data were lacking, numerical thresholds were set by estimating 1% of the global population.
	(iii) The site is known or thought to hold, on a regular basis, ^{3} 20,000 waterbirds or >10,000 pairs of seabirds of one or more species. *Or*	This is the Ramsar criterion for waterbirds, the use of which is discouraged wherever data are good enough to permit the use of (i) of (ii).
	(iv) The site is known or thought to exceed thresholds set for migratory species at bottleneck sites.	Thresholds are set regionally or inter-regionally, as appropriate.

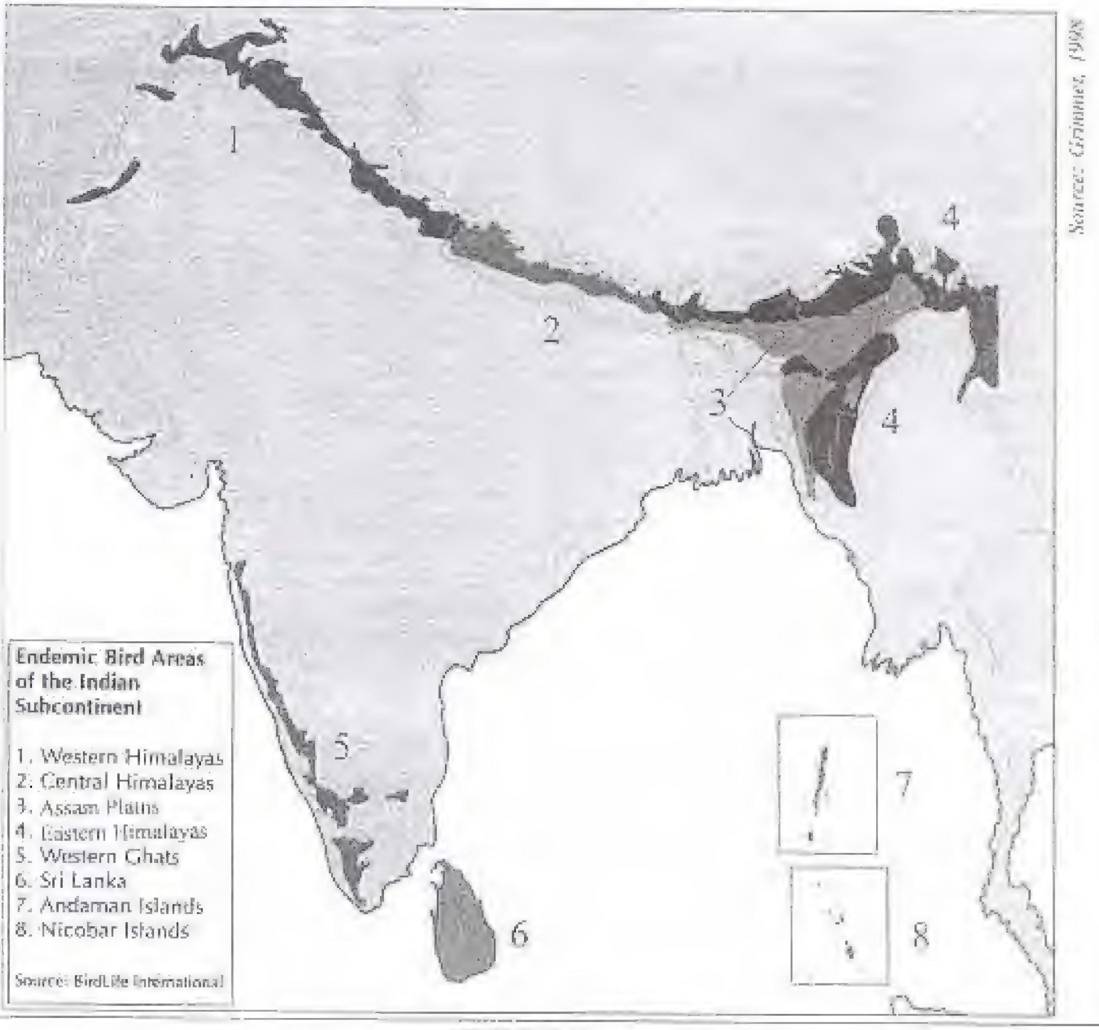
APPENDIX II

Red Data Book threatened bird species reported from India (Source, BirdLife International 2001)

	SPECIES	ENGLISH			SPECIES	ENGLISH	
1	*Pelecanus crispus*	Dalmatian Pelican	CD	41	*Gallinago nemoricola*	Wood Snipe	VU
2	*Pelecanus philippensis*	Spot-billed Pelican	VU	42	*Tringa guttifer*	Spotted Greenshank	EN
3	*Fregata andrewsi*	Christmas Island Frigatebird	VU	43	*Eurynorhynchus pygmeus*	Spoon-billed Sandpiper	VU
4	*Ardea insignis*	White-bellied Heron	EN	44	*Rhinoptilus bitorquatus*	Jerdon's Courser	CR
5	*Ciconia boyciana*	Oriental Stork	EN	45	*Rynchops albicollis*	Indian Skimmer	VU
6	*Leptoptilos javanicus*	Lesser Adjutant	VU	46	*Columba eversmanni*	Eastern Stock Pigeon	VU
7	*Leptoptilos dubius*	Greater Adjutant	EN	47	*Columba elphinstonii*	Nilgiri Wood-pigeon	VU
8	*Oxyura leucocephala*	White-headed Duck	EN	48	*Columba punicea*	Purple Wood Pigeon	VU
9	*Anser erythropus*	Lesser White-fronted Goose	VU	49	*Otus alius*	Nicobar Scops-owl	DD
10	*Cairina scutulata*	White-winged Duck	EN	50	*Heteroglaux blewitti*	Forest Owlet	CR
11	*Anas formosa*	Baikal Teal	VU	51	*Apus acuticauda*	Khasi Hills Swift	VU
12	*Marmaronetta angustirostris*	Marbled Teal	VU	52	*Aceros nipalensis*	Rufous-necked Hornbill	VU
13	*Rhodonessa caryophyllacea*	Pink-headed Duck	CR	53	*Aceros narcondami*	Narcondam Hornbill	VU
14	*Aythya baeri*	Baer's Pochard	VU	54	*Pycnonotus xantholaemus*	Yellow-throated Bulbul	VU
15	*Haliaeetus leucoryphus*	Pallas's Fish-eagle	VU	55	*Hypsipetes nicobariensis*	Nicobar Bulbul	VU
16	*Accipiter butleri*	Nicobar Sparrowhawk	VU	56	*Turdus feae*	Grey-sided Thrush	VU
17	*Aquila clanga*	Greater Spotted Eagle	VU	57	*Brachypteryx hyperythra*	Rusty-bellied Shortwing	VU
18	*Aquila heliaca*	Eastern Imperial Eagle	VU	58	*Brachypteryx major*	White-bellied Shortwing	VU
19	*Falco naumanni*	Lesser Kestrel	VU	59	*Saxicola macrorhyncha*	Stoliczka's Bushchat	VU
20	*Megapodius nicobariensis*	Nicobar Megapode	VU	60	*Saxicola insignis*	Hodgson's Bushchat	VU
21	*Francolinus gularis*	Swamp Francolin	VU	61	*Garrulax cachinnans*	Rufous-breasted Laughingthrush	EN
22	*Perdicula manipurensis*	Manipur Bush-quail	VU	62	*Pellorneum palustre*	Marsh Babbler	VU
23	*Arborophila mandellii*	Red-breasted Hill-Partridge	VU	63	*Spelaeornis badeigularis*	Mishmi Wren-Babbler	VU
24	*Ophrysia superciliosa*	Himalayan Quail	CR	64	*Spelaeornis longicaudatus*	Tawny-breasted Wren-babbler	VU
25	*Tragopan melanocephalus*	Western Tragopan	VU	65	*Stachyris oglei*	Snowy-throated Babbler	VU
26	*Tragopan blythii*	Blyth's Tragopan	VU	66	*Chrysomma altirostre*	Jerdon's Babbler	VU
27	*Lophophorus sclateri*	Sclater's Monal	VU	67	*Turdoides longirostris*	Slender-billed Babbler	VU
28	*Catreus wallichi*	Cheer Pheasant	VU	68	*Paradoxornis flavirostris*	Black-breasted Parrotbill	VU
29	*Syrmaticus humiae*	Mrs. Hume's Pheasant	VU	69	*Prinia cinereocapilla*	Grey-crowned Prinia	VU
30	*Pavo muticus*	Green Peafowl	VU	70	*Chaetornis striatus*	Bristled Grass-Warbler	VU
31	*Grus leucogeranus*	Siberian Crane	CR	71	*Schoenicola platyura*	Broad-tailed Grassbird	VU
32	*Grus monacha*	Hooded Crane	VU	72	*Ficedula subrubra*	Kashmir Flycatcher	VU
33	*Grus nigricollis*	Black-necked Crane	VU	73	*Parus nuchalis*	Pied Tit	VU
34	*Grus antigone*	Sarus Crane	VU	74	*Sitta formosa*	Beautiful Nuthatch	VU
35	*Rallina canningi*	Andaman Crake	DD	75	*Amandava formosa*	Green Munia	VU
36	*Heliopais personata*	Masked Finfoot	VU	76	*Ploceus megarhynchus*	Finn's Weaver	VU
37	*Ardeotis nigriceps*	Great Indian Bustard	EN	77	*Gyps bengalensis*	White-backed Vulture	CR
38	*Houbaropsis bengalensis bengalensis*	Bengal Florican	EN	78	*Gyps indicus*	Long-billed Vulture **	CR
39	*Sypheotides indica*	Lesser Florican	EN	79	*Gyps tenuirostris*	Slender-billed Vulture **	CR
40	*Vanellus gregarius*	Sociable Lapwing	VU				

NOTE

1. Species listed as Critical (CR), Endangered (EN), Vulnerable (VU), Data Deficient (DD) or Conservation Dependent (CD) in the Asian Red Data Book.
2. Near Threatened (NT) species have not been included.
3. **Earlier the Long-billed Vulture (*Gyps indicus*) had two subspecies *G. indicus indicus* and *G. indicus tenuirostris* (Ali and Ripley, 1987) but now the subspecies have been elevated to full species: Long-billed Vulture *G. indicus* and Slenderbilled Vulture *G. tenuirostris* (Rasmussen and Parry 2000).



APPENDIX III

Endemic bird areas in India with the list of restricted range bird species found in them:

1. Western Ghats

1	Nilgiri Wood Pigeon	*Columba elphinstoni*
2	Blue-winged Parakeet	*Psittacula columboides*
3	Malabar Grey-Hornbill	*Ocyceros griseus*
4	Nilgiri Pipit	*Anthus nilghiriensis*
5	Grey-headed Bulbul	*Pycnonotus priocephalus*
6	Black-and-Orange Flycatcher	*Ficedula nigrorufa*
7	Broad-tailed Grassbird	*Schoenicola platyura*
8	Small Sunbird	*Nectarinia minima*
9	Grey-breasted Laughingthrush	*Garrulax jerdoni*
10.	Nilgiri Flycatcher	*Eumyias albicaudata*
11.	Indian Rufous Babbler	*Turdoides subrufus*
12.	Nilgiri Laughingthrush	*Garrulax cachinnans*
13.	White-bellied Blue Flycatcher	*Cyornis pallipes*
14.	White-bellied Shortwing	*Brachypteryx major*
15.	White-bellied Treepie	*Dendrocitta leucogastra*
16.	Wynaad Laughingthrush	*Garrulax delesserti*

2. Andaman Islands

1.	Andaman Serpent-Eagle	*Spilornis elgini*
2.	Nicobar Megapode	*Megapodius nicobariensis*
3.	Andaman Crake	*Rallina canningi*
4.	Andaman Wood-Pigeon	*Columba palumboides*
5.	Andaman Cuckoo-dove	*Macropygia rufipennis*
6.	Andaman Hawk-owl	*Ninox affinis*
7.	Narcondam Hornbill	*Aceros narcondami*
8.	Andaman Black Woodpecker	*Dryocopus hodgei*
9.	Andaman Drongo	*Dicrurus andamanensis*
10.	Andaman Treepie	*Dendrocitta bayleyi*
11.	White-headed Starling	*Sturnus erythropygius*

3. Nicobar Islands

1.	Nicobar Serpent-eagle	*Spilornis minimus*
2.	Nicobar Sparrowhawk	*Accipiter butleri*
3.	Nicobar Megapode	*Megapodius nicobariensis*
4.	Andaman Wood Pigeon	*Columba palumboides*
5.	Andaman Cuckoo-dove	*Macropygia rufipennis*
7.	Nicobar Parakeet	*Psittacula caniceps*
8.	Andaman Hawk-owl	*Ninox affinis*
9.	Nicobar Bulbul	*Hypsipetes nicobariensis*
10.	White-headed Starling	*Sturnus erythropygius*

4. Western Himalayas

1.	Himalayan Quail	*Ophrysia superciliosa*
2.	Western Tragopan	*Tragopan melanocephalus*
3.	Cheer Pheasant	*Catreus wallichii*
4.	Brooke's Leaf Warbler	*Phylloscopus subviridis*
5.	Kashmir Flycatcher	*Ficedula subrubra*
6.	Kashmir Nuthatch	*Sitta cashmirensis*
7.	Orange Bullfinch	*Pyrrhula aurantiaca*
8.	Spectacled Finch	*Callacanthis burtoni*
9.	White-cheeked Tit	*Aegithalos leucogenys*
10.	Tytler's Leaf Warbler	*Phylloscopus tytleri*
11.	White-throated Tit	*Aegithalos niveogularis*

5. Eastern Himalayas

1.	Khasi Hills Swift	*Apus acuticauda*
2.	Ward's Trogon	*Harpactes wardi*
3.	Red-breasted Hill-Partridge	*Arborophila mandellii*
4.	Blyth's Tragopan	*Tragopan blythii*
5.	Sclater's Monal	*Lophophorus sclateri*
6.	Beautiful Sibia	*Heterophasia pulchella*
7.	Broad-billed Flycatcher Warbler	*Tickellia hodgsoni*
8.	Brown-capped Laughingthrush	*Garrulax austeni*
9.	Grey Sibia	*Heterophasia gracilis*
10.	Hoary-throated Barwing	*Actinodura nipalensis.*
11.	Brown-throated Tit-Babbler	*Alcippe ludlowi*
12.	Rufous-throated Wren-babbler	*Spaeleornis caudatus*

5. Eastern Himalayas (contd.)

13.	Rusty-bellied Shortwing	*Brachypteryx hyperythra*
14.	Mishmi Wren Babbler	*Spelaeornis badeigualris*
15.	Austen's Babbler	*Stachyris oglei*
16.	Austen's Barwing	*Actinodura waldeni*
17.	Striped Laughingthrush	*Garrulax virgatus*
18.	Tawny-breasted Wren-babbler	*Speleornis longicaudatus*
19.	Wedge-billed Wren-babbler	*Sphenocichla humei*
20.	White-naped Yuhina	*Yuhina bakeri*
21	Black-browed Leaf Warbler	*Phylloscopus cantator*

6.Assam Plains

1.	Manipur Bush Quail	*Perdicula manipurensis*
2.	Blackbreasted Parrotbill	*Paradoxornis flavirostris*
3.	Marsh Babbler	*Pellorneum palustre*

7.Southern Tibet

1	Giant Babax	*Babax waddelli*

Secondary Areas in India with a list of restricted range species found in them:

1. Eastern Andhra Pradesh

1	Jerdon's Courser	*Rhinoptilus bitorquatus*

2. Southern Deccan plateau

1.	Yellow-throated Bulbul	*Pycnonotus xantholaemus*

3. Indus plains

1.	Sind Sparrow	*Passer pyrrhonotus*

4. Central Indian Forests

1.	Forest Owlet	*Heteroglaux blewitti*

5. North Myanmar lowlands

1.	Chestnut-backed Laughingthrush	*Garrulax nuchalis*

APPENDIX 4 BIOME WISE DISTRIBUTION OF BIRD SPECIES

BIOME 05 : **EURASIAN HIGH MONTANE (ALPINE AND TIBETAN)**
BIOME 07 : **SINO-HIMALAYAN TEMPERATE FOREST**
BIOME 08 : **SINO-HIMALAYAN SUBTROPICAL FOREST**
BIOME 09 : **INDOCHINESE TROPICAL MOIST FOREST**
BIOME 10 : **INDIAN PENINSULA TROPICAL MOIST FOREST**
BIOME 11 : **INDO-MALAYAN TROPICAL DRY ZONE**
BIOME 12 : **INDO-GANGETIC PLAINS**
BIOME 13 : **SAHARO-SINDIAN DESERT**

BIOME 05: EURASIAN HIGH MONTANE (ALPINE AND TIBETAN)

LOCATION: The Altay-Sayan mountains in south-eastern Russia, western Mongolia and north-western China, the Tien Shan and Qinghai-Tibetan Plateau in China, and northern (Trans-Himalayan) Pakistan, India, Nepal, Bhutan, and Myanmar (extends westward into the central Asian republics, the Middle East and Europe). Open habitats at and above the tree-line, mainly above c. 3,600 m.

KEY HABITATS: Scrub and open habitats at and above the tree-line, including alpine and subalpine scrub and grassland; inland cliffs and rocky slopes; scree and boulders; montane wetlands; gravel and sand plains.

ENDEMIC BIRD AREAS AND SECONDARY AREAS: Southern Tibet (EBA 133; 2 species); Eastern Tibet (EBA 134; 2 species); Southern Xinjiang mountains (SA 076; 1 species); Mongolian mountains (SA 077; 1 species); Northern Qinghai-Tibetan plateau (SA 078; 1 species).

	Scientific name	English name
1.	*Gyps himalayensis*	Himalayan Griffon
2.	*Lerwa lerwa*	Snow Partridge
3.	*Tetraogallus tibetanus*	Tibetan Snowcock
4.	*Tetraogallus himalayensis*	Himalayan Snowcock
5.	*Perdix hodgsoniae*	Tibetan Partridge
6.	*Grus nigricollis*	Black-necked Crane
7.	*Gallinago solitaria*	Solitary Snipe
8.	*Gallinago nemoricola*	Wood Snipe
9.	*Ibidorhyncha struthersii*	Ibisbill
10.	*Larus brunnicephalus*	Brown-headed Gull
11.	*Syrrhaptes tibetanus*	Tibetan Sandgrouse
12.	*Columba leuconota*	Snow Pigeon
13.	*Melanocorypha maxima*	Long-billed Calandra Lark
14.	*Calandrella acutirostris*	Hume's Short-toed Lark
15.	*Anthus roseatus*	Rosy Pipit
16.	*Anthus spinoletta*	Water Pipit
17.	*Lanius tephronotus*	Grey-backed Shrike
18.	*Prunella collaris*	Alpine Accentor
19.	*Prunella himalayana*	Altai Accentor
20.	*Prunella rubeculoides*	Robin Accentor

BIOME 05 EURASIAN HIGH MONTANE (ALPINE AND TIBETAN) *(Contd.)*

21.	*Prunella fulvescens*	Brown Accentor
22.	*Zoothera mollissima*	Plain-backed Thrush
23.	*Turdus kessleri*	Kessler's Thrush
24.	*Phoenicurus hodgsoni*	Hodgson's Redstart
25.	*Phoenicurus erythrogaster*	Guldenstadt's Redstart
26.	*Grandala coelicolor*	Grandala
27.	*Saxicola insignis*	Hodgson's Bushchat
28.	*Garrulax henrici*	Prince Henri's Laughingthrush
29.	*Leptopoecile sophiae*	Stoliczka's Tit-Warbler
30.	*Phylloscopus fuligiventer*	Smoky Warbler
31.	*Phylloscopus affinis*	Tickell's Warbler
32	*Phylloscopus griseolus*	Olivaceous Leaf Warbler
33.	*Tichodroma muraria*	Wallcreeper
34.	*Leucosticte nemoricola*	Hodgson's Mountain-finch
35.	*Leucosticte brandti*	Black-headed Mountain-finch
36.	*Rhodopechys sanguinea*	Crimson-winged Finch
37.	*Carpodacus pulcherrimus*	Beautiful Rosefinch
38.	*Carpodacus rhodochlamys*	Red-mantled Rosefinch
39.	*Carpodacus rubicilloides*	Streaked Great Rosefinch
40.	*Carpodacus rubicilla*	Common Great Rosefinch
41.	*Carpodacus puniceus*	Red-fronted Rosefinch
42.	*Montifringilla nivalis*	Pallas's Snowfinch
43.	*Montifringilla adamsi*	Tibetan Snowfinch
44.	*Montifringilla taczanowskii*	Mandelli's Snowfinch
45.	*Montifringilla ruficollis*	Rufous-necked Snowfinch
46.	*Montifringilla blanfordi*	Plain-backed Snowfinch
47.	*Pseudopodoces humilis*	Hume's Groundpecker
48.	*Pyrrhocorax graculus*	Yellow-billed Chough

BIOME 07: **SINO-HIMALAYAN TEMPERATE FOREST**

LOCATION: The mountains bordering the Qinghai-Tibetan Plateau in southern and western China, northern Pakistan and India, Nepal and Bhutan, the mountains of Bangladesh, Myanmar, Taiwan, northern Laos, Thailand and Vietnam, and the Altay-Sayan and Tien Shan ranges in south-eastern Russia, western Mongolia and north-western China (extends westward into Afghanistan and the central Asian republics). Mainly between c. 1,800 and 3,600 m.

KEY HABITATS: Broadleaf evergreen forest; Broadleaf deciduous, mixed broadleaf-coniferous and coniferous forest; Montane grassland.

ENDEMIC BIRD AREAS AND SECONDARY AREAS: Western Himalayas (EBA 128; 11 species); Central Himalayas (EBA 129; 3 species); Eastern Himalayas (EBA 130; 22 species); Qinghai mountains (EBA 135; 2 species); Shanxi mountains (EBA 136; 2 species); Central Sichuan mountains (EBA 137; 11 species); West Sichuan mountains (EBA 138; 3 species); Yunnan mountains (EBA 139; 3 species); Fan-Si-Pan and northern Laos (SA 082; 4 species).

	Scientific name	English name
1.	*Tetraophasis szechenyii*	Buff-throated Partridge
2.	*Arborophila torqueola*	Common Hill Partridge
3.	*Ithaginis cruentus*	Blood Pheasant
4.	*Tragopan satyra*	Satyr Tragopan
5.	*Tragopan temminckii*	Temminck's Tragopan
6.	*Pucrasia macrolopha*	Koklass Pheasant
7.	*Lophophorus impejanus*	Impeyan Monal
8.	*Columba hodgsonii*	Speckled Wood-pigeon
9.	*Psittacula derbiana*	Lord Derby's Parakeet
10.	*Indicator xanthonotus*	Yellow-rumped Honeyguide
11.	*Dendrocopos darjellensis*	Darjeeling Pied Woodpecker
12.	*Dendrocopos himalayensis*	Himalayan Pied Woodpecker
13.	*Delichon nipalensis*	Nepal House-martin
14.	*Prunella strophiata*	Rufous-breasted Accentor
15.	*Prunella atrogularis*	Black-throated Accentor
16.	*Prunella immaculata*	Maroon-backed Accentor
17.	*Zoothera dixoni*	Long-tailed Thrush
18.	*Zoothera monticola*	Greater Long-billed Thrush
19.	*Turdus albocinctus*	White-collared Blackbird

BIOME 07: **SINO-HIMALAYAN TEMPERATE FOREST** ***(Contd.)***

	Scientific name	English name
20.	*Turdus rubrocanus*	Chestnut Thrush
21.	*Brachypteryx stellata*	Gould's Shortwing
22.	*Luscinia pectoralis*	Himalayan Rubythroat
23.	*Luscinia pectardens*	Firethroat
24.	*Luscinia brunnea*	Indian Blue Robin
25.	*Tarsiger chrysaeus*	Golden Bush-robin
26.	*Tarsiger indicus*	White-browed Bush-robin
27.	*Tarsiger hyperythrus*	Rufous-breasted Bush-robin
28.	*Phoenicurus erythronota*	Eversmann's Redstart
29.	*Phoenicurus caeruleocephalus*	Blue-capped Redstart
30.	*Phoenicurus schisticeps*	White-throated Redstart
31.	*Hodgsonius phaenicuroides*	White-bellied Redstart
32.	*Garrulax albogularis*	White-throated Laughingthrush
33.	*Garrulax striatus*	Striated Laughingthrush
34.	*Garrulax ocellatus*	Spotted Laughingthrush
35.	*Garrulax lineatus*	Streaked Laughingthrush
36.	*Garrulax subunicolor*	Scaly Laughingthrush
37.	*Garrulax elliotii*	Elliot's Laughingthrush
38.	*Garrulax variegatus*	Variegated Laughingthrush
39.	*Garrulax affinis*	Black-faced Laughingthrush
40.	*Xiphirhynchus superciliaris*	Slender-billed Scimitar-babbler
41.	*Pnoepyga albiventer*	Greater Scaly-breasted Wren-babbler
42.	*Spelaeornis troglodytoides*	Bar-winged Wren-babbler
43.	*Spelaeornis formosus*	Spotted Wren-babbler
44	*Spelaeornis chocolatinus*	Long-tailed Wren-babbler
45.	*Pteruthius xanthochlorus*	Green Shrike-babbler
46	*Minla strigula*	Bar-throated Minla
47.	*Minla ignotincta*	Red-tailed Minla
48.	*Alcippe chrysotis*	Gold-breasted Tit-Babbler

BIOME 07: **SINO-HIMALAYAN TEMPERATE FOREST** *(Contd.)*

	Scientific name	English name
49.	*Alcippe vinipectus*	White-browed Tit-Babbler
50.	*Heterophasia capistrata*	Rufous Sibia
51.	*Yuhina gularis*	Stripe-throated Yuhina
52.	*Yuhina occipitalis*	Rufous-vented Yuhina
53.	*Myzornis pyrrhoura*	Myzornis
54.	*Conostoma oemodium*	Great Parrotbill
55.	*Paradoxornis unicolor*	Brown Parrotbill
56.	*Paradoxornis fulvifrons*	Fulvous-fronted Parrotbill
57.	*Tesia castaneocoronata*	Chestnut-headed Tesia
58.	*Tesia cyaniventer*	Grey-bellied Tesia
59.	*Cettia major*	Chestnut-crowned Bush-Warbler
60.	*Cettia flavolivacea*	Aberrant Bush-Warbler
61.	*Cettia acanthizoides*	Yellow-bellied Bush-Warbler
62.	*Cettia brunnifrons*	Grey-sided Bush-Warbler
63.	*Bradypterus major*	Long-billed Bush-Warbler
64.	*Phylloscopus subaffinis*	Buff-throated Warbler
65.	*Phylloscopus pulcher*	Orange-barred Leaf Warbler
66.	*Phylloscopus maculipennis*	Grey-faced Leaf Warbler
67.	*Phylloscopus magnirostris*	Large-billed Leaf-Warbler
68.	*Phylloscopus occipitalis*	Western Crowned-Warbler
69.	*Seicercus poliogenys*	Grey-cheeked Flycatcher Warbler
70.	*Muscicapa ruficauda*	Rusty-tailed Flycatcher
71.	*Muscicapa ferruginea*	Ferruginous Flycatcher
72.	*Ficedula hodgsonii*	Rufous-breasted Blue Flycatcher
73.	*Ficedula strophiata*	Orange-gorgeted Flycatcher
74.	*Ficedula superciliaris*	Ultramarine Flycatcher
75.	*Ficedula tricolor*	Slaty-blue Flycatcher
76.	*Ficedula sapphira*	Sapphire Flycatcher
77.	*Niltava sundara*	Rufous-bellied Niltava

BIOME 07: **SINO-HIMALAYAN TEMPERATE FOREST** *(Contd.)*

	Scientific name	English name
78.	*Aegithalos iouschistos*	Rufous-fronted Tit
79.	*Cephalopyrus flammiceps*	Fire-capped Tit
80	*Parus rufonuchalis*	Simla Crested Tit
81	*Parus rubidiventris*	Rufous-bellied Crested Tit
82.	*Parus melanolophus*	Spot-winged Crested Tit
83.	*Parus dichrous*	Brown Crested Tit
84	*Parus monticolus*	Green-backed Tit
85.	*Sylviparus modestus*	Yellow-browed Tit
86	*Sitta himalayensis*	White-tailed Nuthatch
87	*Sitta leucopsis*	White-cheeked Nuthatch
88	*Certhia himalayana*	Bar-tailed Tree-creeper
89.	*Certhia nipalensis*	Rusty-flanked Tree-creeper
90.	*Dicaeum melanoxanthum*	Yellow-bellied Flowerpecker
91	*Aethopyga ignicauda*	Fire-tailed Sunbird
92.	*Serinus thibetanus*	Tibetan Siskin
93.	*Carduelis spinoides*	Yellow-breasted Greenfinch
94.	*Carduelis ambigua*	Black-headed Greenfinch
95	*Carpodacus rubescens*	Blanford's Rosefinch
96	*Carpodacus nipalensis*	Dark-breasted Rosefinch
97	*Carpodacus rodochrous*	Pink-browed Rosefinch
98	*Carpodacus vinaceus*	Vinaceous Rosefinch
99.	*Carpodacus edwardsii*	Dark-rumped Rosefinch
100.	*Carpodacus rodopeplus*	Spot-winged Rosefinch
101.	*Carpodacus thura*	White-browed Rosefinch
102.	*Propyrrhula subhimachala*	Crimson-browed Finch
103.	*Haematospiza sipahi*	Scarlet Finch
104.	*Pyrrhula nipalensis*	Brown Bullfinch
105.	*Pyrrhula erythrocephala*	Red-headed Bullfinch
106.	*Pyrrhula erythaca*	Beavans Bullfinch

	Scientific name	English name
107.	*Mycerobas icterioides*	Black-and-yellow Grosbeak
108.	*Mycerobas affinis*	Collared Grosbeak
109.	*Mycerobas melanozanthos*	Spotted-winged Grosbeak
110.	*Mycerobas carnipes*	White-winged Grosbeak
111.	*Pyrrhoplectes epauletta*	Gold-naped Black Finch
112.	*Urocissa flavirostris*	Yellow-billed Blue Magpie

BIOME 08: **SINO-HIMALAYAN SUBTROPICAL FOREST**

LOCATION: South-eastern China, Taiwan, the Himalayan foothills of Pakistan, India, Nepal and Bhutan, and the mountains of Bangladesh, Myanmar, Thailand, Laos, Cambodia, Vietnam and peninsular Malaysia. Mainly between *c.* 1,000 and 2,000 m.

KEY HABITATS: Lower montane rain forest; Hill evergreen forest; Pine forest.

ENDEMIC BIRD AREAS AND SECONDARY AREAS: Chinese subtropical forests (EBA 140; 5 species); South-East Chinese mountains (EBA 141; 5 species); Hainan (EBA 142; 4 species); Da Lat plateau (EBA 145; 8 species); Taiwan (EBA 149; 15 species); Myanmar-Thailand mountains (SA 080; 1 species); Doi Chiang Dao (SA 081; 1 species); Southern Laos (SA 083; 2 species); Kontum Plateau (SA 084; 3 species); Thailand-Cambodia mountains (SA 085; 1 species).

NOTES: A few of the species of this biome range into the mountains of peninsular Malaysia, and there is therefore some overlap with the Sundaic montane forest (Biome 15). Note that the division of this biome from the Indochinese tropical moist forest (Biome 09) is particularly difficult, with some species listed for the two biomes overlapping in altitudinal range.

	Scientific name	English name
1.	*Microhierax melanoleucos*	Pied Falconet
2.	*Arborophila rufogularis*	Rufous-throated Hill-Partridge
3.	*Bambusicola fytchii*	Mountain Bamboo-partridge
4.	*Syrmaticus humiae*	Mrs. Hume's Pheasant
5.	*Porzana bicolor*	Elwes's Crake
6.	*Psittacula himalayana*	Slaty-headed Parakeet
7.	*Psittacula finschii*	Grey-headed Parakeet
8.	*Chrysococcyx maculatus*	Asian Emerald Cuckoo

BIOME 08: **SINO-HIMALAYAN SUBTROPICAL FOREST** (*Contd.*)

	Scientific name	English name
9.	*Batrachostomus hodgsoni*	Hodgson's Frogmouth
10.	*Alcedo hercules*	Blyth's Kingfisher
11.	*Anorrhinus tickelli*	Brown Hornbill
12.	*Aceros nipalensis*	Rufous-necked Hornbill
13.	*Megalaima franklinii*	Golden-throated Barbet
14.	*Megalaima asiatica*	Blue-throated Barbet
15.	*Dendrocopos atratus*	Stripe-breasted Woodpecker
16.	*Blythipicus pyrrhotis*	Bay Woodpecker
17.	*Pitta nipalensis*	Blue-naped Pitta
18.	*Coracina melaschistos*	Black-winged Cuckoo-shrike
19.	*Pericrocotus roseus*	Rosy Minivet
20.	*Pericrocotus brevirostris*	Short-billed Minivet
21.	*Spizixos canifrons*	Crested Finchbill
22.	*Pycnonotus striatus*	Striated Bulbul
23.	*Pycnonotus leucogenys*	Himalayan Bulbul
24.	*Pycnonotus flavescens*	Blyth's Bulbul
25.	*Alophoixus flaveolus*	White-throated Bulbul
26.	*Hypsipetes mcclellandii*	Rufous-bellied Bulbul
27.	*Hypsipetes leucocephalus*	Black Bulbul
28.	*Chloropsis hardwickii*	Orange-bellied Chloropsis
29.	*Lanius collurioides*	Burmese Shrike
30.	*Monticola cinclorhynchus*	Blue-headed Rock-thrush
31.	*Zoothera wardii*	Pied Thrush
32.	*Zoothera marginata*	Lesser Long-billed Thrush
33.	*Turdus unicolor*	Tickell's Thrush
34.	*Turdus dissimilis*	Black-breasted Thrush
35.	*Turdus boulboul*	Grey-winged Blackbird
36.	*Myiomela leucurum*	White-tailed Robin
37.	*Cinclidium frontale*	Blue-fronted Robin

BIOME 08: **SINO-HIMALAYAN SUBTROPICAL FOREST** (*Contd.*)

	Scientific name	English name
38.	*Enicurus schistaceus*	Slaty-backed Forktail
39.	*Cochoa purpurea*	Purple Cochoa
40.	*Cochoa viridis*	Green Cochoa
41.	*Garrulax galbanus*	Yellow-throated Laughingthrush
42.	*Garrulax gularis*	Rufous-vented Laughingthrush
43.	*Garrulax cineraceus*	Ashy Laughingthrush
44.	*Garrulax rufogularis*	Rufous-chinned Laughingthrush
45.	*Garrulax caerulatus*	Grey-sided Laughingthrush
46.	*Garrulax merulinus*	Spot-breasted Laughingthrush
47	*Garrulax sannio*	White-browed Laughingthrush
48	*Garrulax squamatus*	Blue-winged Laughingthrush
49	*Liocichla phoenicea*	Red-faced Liocichla
50.	*Pellorneum albiventre*	Spot-throated Babbler
51	*Pomatorhinus erythrocnemis*	Spot-breasted Scimitar-babbler
52	*Pomatorhinus erythrogenys*	Rusty-cheeked Scimitar-babbler
53.	*Pomatorhinus ochraceiceps*	Lloyd's Scimitar-Babbler
54.	*Napothera brevicaudata*	Streaked Wren-babbler
55.	*Stachyris ruficeps*	Rufous-capped Babbler
56.	*Stachyris pyrrhops*	Black-chinned Babbler
57.	*Babax lanceolatus*	Chinese Babax
58.	*Leiothrix lutea*	Red-billed Leiothrix
59.	*Cutia nipalensis*	Cutia
60.	*Pteruthius rufiventer*	Rufous-bellied Shrike Babbler
61.	*Gampsorhynchus rufulus*	White-hooded Babbler
62.	*Actinodura egertoni*	Rusty-fronted Barwing
63.	*Minla cyanouroptera*	Blue-winged Minla
64.	*Alcippe cinerea*	Yellow-throated Tit-Babbler
65.	*Alcippe cinereiceps*	Streak-throated Tit- Babbler
66.	*Alcippe brunnea*	Dusky Fulvetta

BIOME 08: **SINO-HIMALAYAN SUBTROPICAL FOREST** *(Contd.)*

	Scientific name	English name
67.	*Alcippe nipalensis*	Nepal Tit-Babbler
68.	*Heterophasia annectens*	Rufous-backed Sibia
69.	*Yuhina castaniceps*	Striated Yuhina
70.	*Yuhina nigrimenta*	Black-chinned Yuhina
71.	*Paradoxornis gularis*	Grey-headed Parrotbill
72.	*Paradoxornis guttaticollis*	Spot-breasted Parrotbill
73.	*Paradoxornis atrosuperciliaris*	Lesser Rufous-headed Parrotbill
74.	*Paradoxornis ruficeps*	Greater Rufous-headed Parrotbill
75.	*Prinia criniger*	Brown Prinia
76.	*Tesia olivea*	Slaty-bellied Tesia
77.	*Cettia pallidipes*	Blanford's Bush-Warbler
78.	*Seicercus xanthoschistos*	Grey-headed Flycatcher Warbler
79.	*Seicercus affinis*	White-spectacled Flycatcher Warbler
80.	*Abroscopus albogularis*	Rufous-faced Flycatcher Warbler
81.	*Abroscopus schisticeps*	Black-faced Flycatcher Warbler
82.	*Muscicapa muttui*	Brown-breasted Flycatcher
83.	*Ficedula monileger*	White-gorgeted Flycatcher
84.	*Niltava macgrigoriae*	Small Niltava
85.	*Aegithalos concinnus*	Red-headed Tit
86.	*Parus spilonotus*	Black-spotted Yellow Tit
87.	*Sitta formosa*	Beautiful Nuthatch
88.	*Aethopyga saturata*	Black-throated Sunbird
89.	*Arachnothera magna*	Streaked Spiderhunter
90.	*Saroglossa spiloptera*	Spot-winged Starling
91.	*Sturnus sinensis*	White-shouldered Starling
92.	*Oriolus tenuirostris*	Slender-billed Oriole
93.	*Oriolus traillii*	Maroon Oriole
94.	*Garrulus lanceolatus*	Black-headed Jay
95.	*Dendrocitta formosae*	Grey Treepie
96.	*Dendrocitta frontalis*	Black-browed Treepie

BIOME 09: **INDOCHINESE TROPICAL MOIST FORESTS**

LOCATION: Southern Nepal and Bhutan, Bangladesh, extreme southern China, Myanmar, Thailand, Laos, Cambodia and Vietnam. Mainly below c.1,000 m.

KEY HABITATS: Lowland evergreen rain forest; Semi-evergreen rain forest; Moist deciduous forest.

ENDEMIC BIRD AREAS AND SECONDARY AREAS: Annamese lowlands (EBA 143; 8 species); South Vietnamese lowlands (EBA 144; 3 species); North Myanmar lowlands (SA 079; 1 species).

	Scientific name	English name
1.	*Ardea insignis*	White-bellied Heron
2.	*Arborophila atrogularis*	White-cheeked Hill-Partridge
3.	*Polyplectron bicalcaratum*	Grey Peacock-pheasant
4	*Heliopais personata*	Masked Finfoot
5.	*Columba punicea*	Purple Wood Pigeon
6	*Dinopium shorii*	Himalayan Golden-backed Woodpecker
7.	*Gecinulus grantia*	Pale-headed Woodpecker
8.	*Pitta cyanea*	Blue Pitta
9.	*Iole virescens*	Olive Bulbul
10.	*Enicurus immaculatus*	Black-backed Forktail
11.	*Garrulax monileger*	Lesser Necklaced Laughingthrush
12.	*Garrulax pectoralis*	Greater Necklaced Laughingthrush
13.	*Garrulax ruficollis*	Rufous-necked Laughingthrush
14.	*Alcippe rufogularis*	Rufous-throated Tit-Babbler
15.	*Prinia cinereocapilla*	Hodgson's Prinia
16.	*Cyornis poliogenys*	Brooks Flycatcher
17.	*Melanochlora sultanea*	Sultan Tit
18.	*Ampeliceps coronatus*	Gold-crested Myna
19.	*Dicrurus annectans*	Crow-billed Drongo

BIOME 10: **INDIAN PENINSULA TROPICAL MOIST FOREST**

LOCATION: The Western Ghats and isolated areas of moist forest in the Eastern Ghats and elsewhere in peninsular India, and the wet zone of Sri Lanka. Mainly below *c.*1,000 m.

KEY HABITATS: Lowland evergreen rain forest; Semi-evergreen rain forest; Moist deciduous forest; Hill evergreen forest.

ENDEMIC BIRD AREAS AND SECONDARY AREAS: Western Ghats (EBA 123; 16 species); Sri Lanka (EBA 124; 23 species); Central Indian forests (SA 075; 1 species).

	Scientific name	English name
1.	*Phaenicophaeus viridirostris*	Small Green-billed Malkoha
2.	*Batrachostomus moniliger*	Ceylon Frogmouth
3.	*Caprimulgus atripennis*	Jerdon's Nightjar
4.	*Collocalia unicolor*	Indian Edible-nest Swiftlet
5.	*Harpactes fasciatus*	Malabar Trogon
6.	*Anthracoceros coronatus*	Malabar Pied-hornbill
7.	*Megalaima viridis*	White-cheeked Barbet
8.	*Megalaima rubricapilla*	Crimson-throated Barbet
9.	*Hirundo domicola*	Hill Swallow
10.	*Iole indica*	Yellow-browed Bulbul
11.	*Myiophonus horsfieldii*	Malabar Whistling-thrush
12.	*Pomatorhinus horsfieldii*	Indian Scimitar-babbler
13.	*Rhopocichla atriceps*	Black-headed Babbler
14.	*Nectarinia lotenia*	Loten's Sunbird
15.	*Lonchura kelaarti*	Black-throated Munia

BIOME 11: **INDO-MALAYAN TROPICAL DRY ZONE**

LOCATION: Pakistan, India, Sri Lanka (dry zone), southern Nepal and Bhutan, Bangladesh, southern China, Myanmar, Thailand, Laos, Cambodia, Vietnam, Malaysia, Indonesia (Java only).

KEY HABITATS: Dry deciduous forest; Dry evergreen forest; Thorn forest; Semi-desert scrub; Wooded grassland; Secondary grassland; Arable land; Abandoned farmland.

ENDEMIC BIRD AREAS AND SECONDARY AREAS: Irrawaddy plains (EBA 132; 2 species); Eastern Andhra Pradesh (SA 071; 1 species); Southern Deccan Plateau (SA 072; 1 species).

NOTES: This biome includes a wide range of habitats, including both forests and open country. Many of the species listed have adapted to man-modified habitats. Some species have changed their distributions so much that they may not prove to be useful in identifying IBAs for the protection of this biome.

BIOME 11: **INDO-MALAYAN TROPICAL DRY ZONE (contd.)**

	Scientific name	English name
1.	*Pseudibis papillosa*	Black Ibis
2.	*Gyps bengalensis*	Indian White-backed Vulture
3.	*Gyps indicus*	Long-billed Vulture
4.	*Sarcogyps calvus*	Red-headed Vulture
5.	*Butastur teesa*	White-eyed Buzzard
6.	*Falco chicquera*	Red-headed Falcon
7.	*Francolinus pictus*	Painted Francolin
8.	*Coturnix coromandelica*	Rain Quail
9.	*Perdicula asiatica*	Jungle Bush-quail
10.	*Perdicula argoondah*	Rock Bush-quail
11.	*Perdicula erythrorhyncha*	Painted Bush-quail
12.	*Galloperdix lunulata*	Painted Spurfowl
13.	*Pavo cristatus*	Indian Peafowl
14.	*Pavo muticus*	Green Peafowl
15.	*Sypheotides indica*	Lesser Florican
16.	*Vanellus malabaricus*	Yellow-wattled Lapwing
17.	*Cursorius coromandelicus*	Indian Courser
18.	*Treron phoenicoptera*	Yellow-legged Green-pigeon
19.	*Psittacula cyanocephala*	Plum-headed Parakeet
20.	*Psittacula roseata*	Blossom-headed Parakeet
21.	*Phaenicophaeus leschenaultii*	Sirkeer Malkoha
22.	*Bubo coromandus*	Dusky Eagle-owl
23.	*Strix ocellata*	Mottled Wood-owl
24.	*Caprimulgus asiaticus*	Common Indian Nightjar
25.	*Ocyceros birostris*	Indian Grey-hornbill
26.	*Megalaima zeylanica*	Brown-headed Barbet
27.	*Megalaima lineata*	Lineated Barbet
28.	*Dendrocopos mahrattensis*	Yellow-fronted Pied Woodpecker
29	*Dinopium benghalense*	Lesser Goldenbacked Woodpecker
30.	*Chrysocolaptes festivus*	Black-shouldered Woodpecker
31.	*Mirafra erythroptera*	Red-winged Bush Lark
32.	*Mirafra assamica*	Bengal Bush Lark
33.	*Eremopterix grisea*	Ashy-crowned Sparrow-lark
34.	*Calandrella raytal*	Indian Short-toed Lark
35.	*Galerida malabarica*	Malabar Crested Lark
36.	*Galerida deva*	Sykes's Crested Lark

BIOME 11: **INDO-MALAYAN TROPICAL DRY ZONE (contd.)**

	Scientific name	English name
37	*Coracina melanoptera*	Black-headed Cuckoo-shrike
38.	*Pericrocotus cinnamomeus*	Small Minivet
39	*Pericrocotus erythropygius*	White-bellied Minivet
40	*Tephrodornis pondicerianus*	Common Woodshrike
41.	*Pycnonotus luteolus*	White-browed Bulbul
42.	*Aegithina nigrolutea*	Marshall's Iora
43	*Saxicoloides fulicata*	Indian Robin
44	*Cercomela fusca*	Indian Chat
45.	*Dumetia hyperythra*	Rufous-bellied Babbler
46	*Turdoides malcolmi*	Large Grey Babbler
47	*Turdoides striatus*	Jungle Babbler
48	*Turdoides affinis*	White-headed Babbler
49	*Prinia buchanani*	Rufous-fronted Prinia
50.	*Prinia sylvatica*	Jungle Prinia
51.	*Prinia socialis*	Ashy Prinia
52.	*Rhipidura aureola*	White-browed Fantail- Flycatcher
53	*Parus nuchalis*	Pied Tit
54	*Amandava formosa*	Green Munia
55	*Padda oryzivora*	Java Sparrow
56.	*Sturnus malabaricus*	Grey-headed Starling
57	*Sturnus pagodarum*	Brahminy Starling
58	*Acridotheres ginginianus*	Bank Myna
59.	*Dicrurus caerulescens*	White-bellied Drongo
60	*Artamus fuscus*	Ashy Woodswallow

BIOME 12: **INDO-GANGETIC PLAINS**

LOCATION: Plains of Pakistan, northern India, southern Nepal and Bhutan, Bangladesh, extreme southern China, Myanmar, Thailand, Laos, Cambodia, Vietnam.

KEY HABITATS: Wetlands; Moist/marshy grassland; Scrub on marshy ground.

ENDEMIC BIRD AREAS AND SECONDARY AREAS: Assam plains (EBA 131: 3 species); Indus plains (SA 074; 1 species).

NOTES:

	Scientific name	English name
1.	*Francolinus gularis*	Swamp Francolin
2.	*Houbaropsis bengalensis*	Bengal Florican
3.	*Saxicola leucura*	White-tailed Stonechat
4.	*Saxicola jerdoni*	Jerdon's Bushchat

BIOME 12: **INDO-GANGETIC PLAINS (contd.)**

	Scientific name	English name
5.	*Chrysomma altirostre*	Jerdon's Babbler
6	*Turdoides earlei*	Striated Babbler
7	*Turdoides longirostris*	Slender-billed Babbler
8	*Prinia burnesii*	Long-tailed Prinia
9	*Chaetornis striatus*	Bristled Grass Warbler
10.	*Graminicola bengalensis*	Rufous-rumped Grass Warbler
11	*Ploceus benghalensis*	Black-breasted Weaver
12.	*Ploceus megarhynchus*	Finn's Weaver
13	*Acridotheres albocinctus*	Collared Myna

BIOME 13: **SAHARO-SINDIAN DESERT**

LOCATION: Pakistan and north-eastern India (extends through southern Iran to the Arabian Peninsula and North Africa)

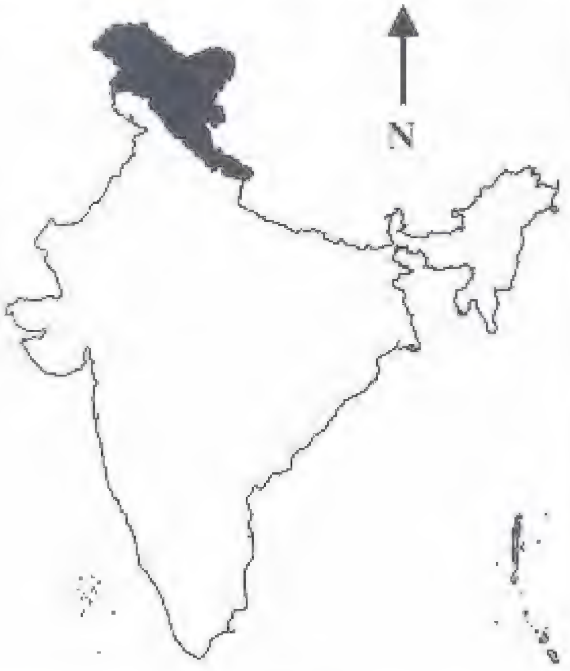
KEY HABITATS; Desert dunes; Gravel and sand plains; Stone desert; Oases.

ENDEMIC BIRD AREAS AND SECONDARY AREAS: None.

	Scientific name	English name
1	*Ardeotis nigriceps*	Great Indian Bustard
2	*Pterocles senegallus*	Spotted Sandgrouse
3	*Caprimulgus mahrattensis*	Sykes's Nightjar
4	*Dendrocopos assimilis*	Sind Pied Woodpecker
5	*Ammomanes deserti*	Desert Finch Lark
6	*Alaemon alaudipes*	Greater Hoopoe-lark
7	*Hirundo fuligula*	Pale Crag-martin
8	*Pycnonotus leucotis*	White-eared Bulbul
9.	*Hypocolius ampelinus*	Hypocolius
10	*Saxicola macrorhyncha*	Stoliczka's Bushchat
11	*Rhodopechys githaginea*	Trumpeter Finch

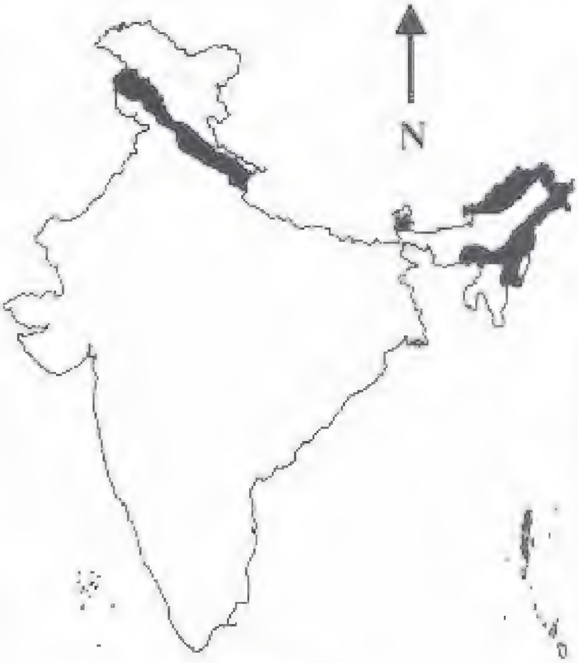
For Biome maps please see Appendix V

APPENDIX V



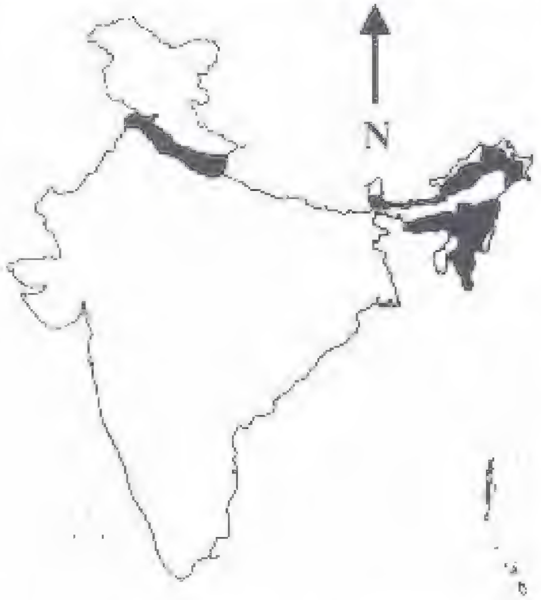
BIOME - 5

EURASIAN HIGH MONTAGE (ALPINE AND TIBETAN



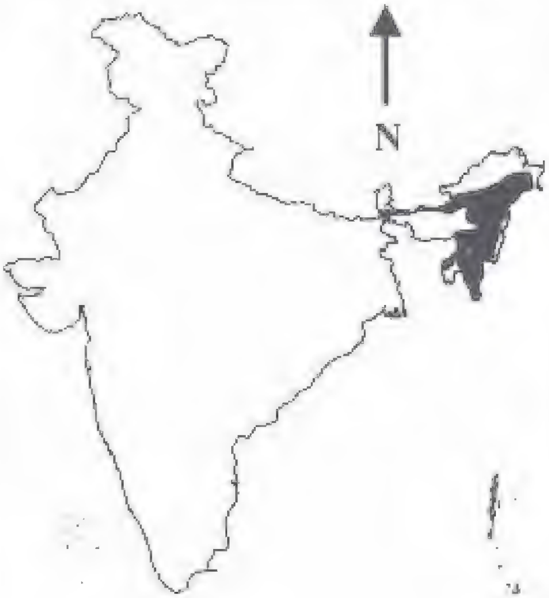
BIOME - 7

SINO - HIMALAYAN TEMPERATE FOREST



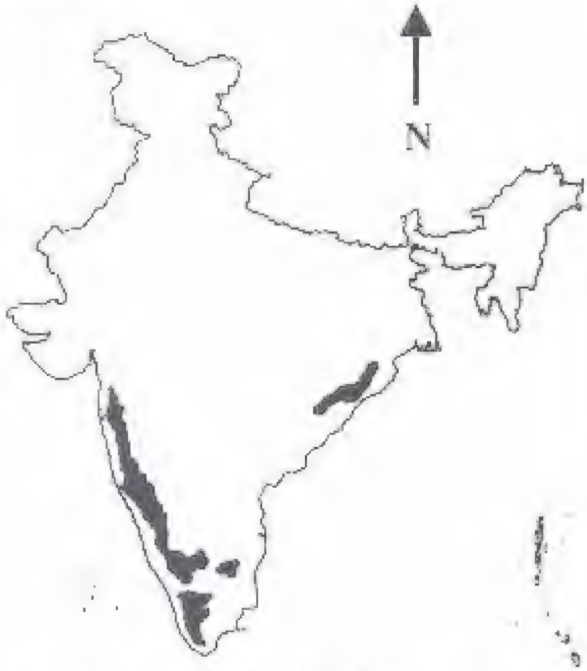
BIOME - 8

SINO - HIMALAYAN SUBTROPICAL FOREST



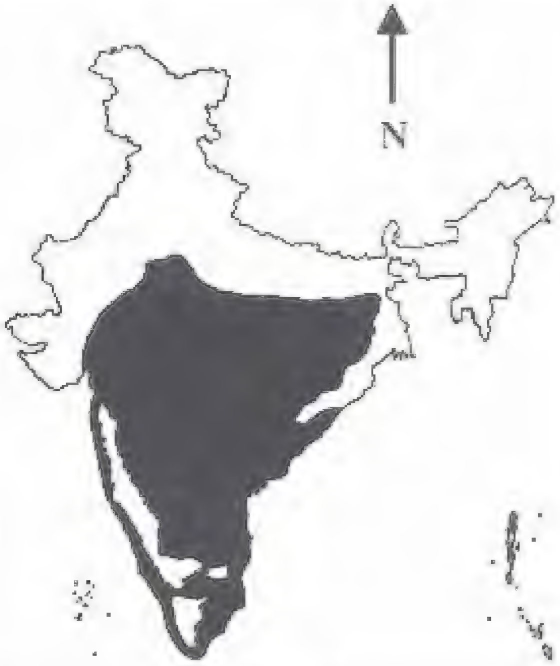
BIOME - 9

INDO - CHINESE TROPICAL MOIST FOREST



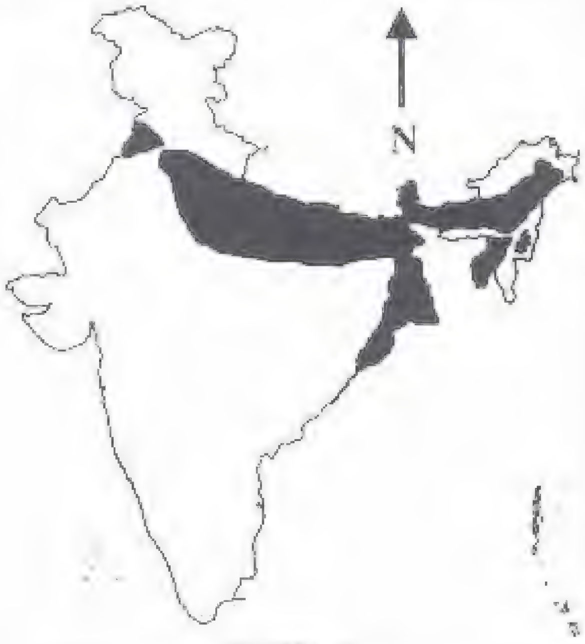
BIOME - 10

INDIAN PENINSULA TROPICAL MOIST FOREST



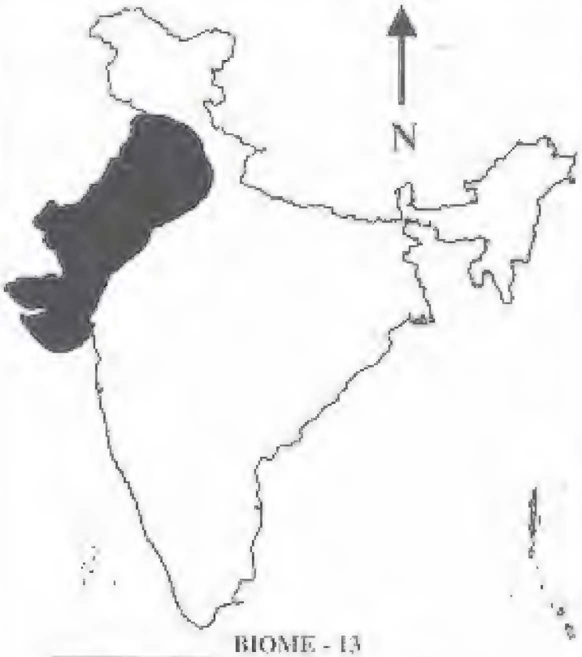
BIOME - 11

INDO - MALAYAN TROPICAL DRY ZONE



BIOME - 12

INDO GANGETIC PLAIN



BIOME - 13

SAHARO-SINDIAN DESERT

APPENDIX VI

List of Thresholds for waterfowl population i.e. 1% of the Biogeographic population of waterfowl. CRITERIA A4i

English name	Threshhold number of individual birds	Species	Threshhold number of individual birds
Little Grebe	5500	Comb Duck	60
Great-crested Grebe	400	Cotton Teal	1500
Great White Pelican	225	Gadwall	2000
Dalmatian Pelican	115	Falcated Duck	5000
Spot-billed Pelican	115	Eurasian Wigeon	7500
Little Cormorant	1500	Mallard	11000
Indian Shag	300	Spot-billed Duck	6000
Great Cormorant	800	Northern Shoveller	6000
Darter	100	Andaman Teal	130
Little Egret	7000	Northern Pintail	15000
Grey Heron	1200	Garganey	7500
Goliath Heron	1	Baikal Teal	1000
White-bellied Heron	1	Common Teal	9000
Purple Heron	500	Marbled Teal	50
Large Egret	500	Pink-headed Duck	1
Median Egret	1000	Red-crested Pochard	750
Cattle Egret	15000	Common Pochard	10000
Indian Pond Heron	5000	Ferruginous Pochard	100
Chinese Pond Heron	1000	Baer's Pochard	100
Striated Pond Heron	1000	Tufted Pochard	10000
Black-crowned Night-Heron	1000	Greater Scaup	5000
Malayan Night-heron	100	Common Goldeneye	250
Little Bittern	150	Smew	250
Yellow Bittern	5000	Red-breasted Merganser	500
Chestnut Bittern	6000	Common Merganser	550
Black Bittern	750	Siberian Crane	30
Painted Stork	200	Sarus Crane	100
Asian Open-billed Stork	1250	Demoiselle Crane	850
Black Stork	55	Common Crane	60
White-necked Stork	150	Black-necked Crane	55
European White Stork	30	White-breasted Waterhen	10000
Oriental White Stork	30	Watercock	500
Black-necked Stork	4	Purple Moorhen	1000

APPENDIX VI (contd.)

List of Thresholds for waterfowl population i.e. 1% of the Biogeographic population of waterfowl.

CRITERIA A4i

Species	Threshold number of individual birds (1% biogeog popula.)	Species	Threshold number of individual birds (1% biogeog popula.)
Lesser Adjutant-Stork	50	Common Moorhen	10000
Greater Adjutant-Stork	7	Common Coot	25000
Glossy Ibis	500	Masked Finfoot	50
Oriental White Ibis	300	Pheasant-tailed Jacana	1000
Black Ibis	100	Bronze-winged Jacana	1000
Eurasian Spoonbill	150	Greater Painted Snipe	1000
Greater Flamingo	2500	Eurasian Oystercatcher	100
Lesser Flamingo	1500	European Golden Plover	18000
Large Whistling-Duck	200	Grey Plover	700
Lesser Whistling-Duck	10000	Common Ringed Plover	1000
Greylag Goose	650	Long-billed Ringed Plover	150
Bar-headed Goose	200	Little Ringed Plover	1000
Brahminy Shelduck	1000	Kentish Plover	1500
White-winged Duck	4	Lesser Sand Plover	2000
Greater Sand Plover	750	Ruff	500
Northern Lapwing	650	Ibisbill	250
Spur-winged Lapwing	100	Black-winged Stilt	5250
Yellow-wattled Lapwing	500	Pied Avocet	400
Grey-headed Lapwing	250	Red-necked Phalarope	3000
Red-wattled Lapwing	1500	Crab Plover	40
Sociable Lapwing	10	Collared Pratincole	250
White-tailed Lapwing	250	Oriental Pratincole	1700
Wood Snipe	50	Small Pratincole	250
Pin-tailed Snipe	2000	Sooty Gull	400
Common Snipe	15000	Heuglin's Gull	2000
Jack Snipe	660	Great Black-headed Gull	500
Black-tailed Godwit	2600	Brown-headed Gull	1000
Bar-tailed Godwit	3300	Andaman Crake	not set
Whimbrel	900	Slaty-legged Crake	not set
Eastern Curlew	500	Water Rail	not set
Spotted Redshank	300	Corn Crake	not set
Common Redshank	2000	Brown Crake	not set

APPENDIX VI (contd.)

List of Thresholds for waterfowl population i.e. 1% of the Biogeographic population of waterfowl.

CRITERIA A4i

Species	Threshold number of individual birds (1% biogeog popula.)	Species	Threshold number of individual birds (1% biogeog popula.)
Marsh Sandpiper	1900	Little Crake	not set
Common Greenshank	650	Baillon's Crake	not set
Spotted Greenshank	10	Spotted Crake	not set
Green Sandpiper	2000	Ruddy-breasted Crake	not set
Wood Sandpiper	10000	Eurasian Woodcock	not set
Terek Sandpiper	1250	Stone Plover	not set
Common Sandpiper	2000	Great Stone Plover	not set
Ruddy Turnstone	750	Jerdon's Courser	not set
Asian Dowitcher	175	Cream-coloured Courser	not set
Red Knot	3000	Indian Courser	not set
Sanderling	750	Broad-billed Sandpiper	500
Little Stint	2000		
Temminck's Stint	750		
Dunlin	1500		
Curlew Sandpiper	3500		
Spoon-billed Sandpiper	50		

APPENDIX VII

Statewise List of Important Bird Areas identified.

(Draft list subject to change)

Sr.No	SITE NAME	CRITERIA
	ANDAMAN ISLANDS	
1	LITTLE ANDAMAN	A1,A2
2	SOUTH SENTINEL	A1,A2
3	NORTH SENTINEL	A1,A2
4	KADAKACHANG	A1,A2
5	KHATAKHARI, NAYA DERA	A1,A2
6	BARANGTANG-RAFTERS CREEK	A1,A2
7	MOUNT DIAVALO/CUTHBERT BAY	A1,A2
8	CHAINPUR & HANSPURI	A1,A2
9	JARAWA RESERVE (MIDDLE ANDAMAN	A1,A2
10	JARAWA RESERVE (SOUTH ANDAMAN)	A1,A2
11	PATTI LEVEL CLIFF BAY	A1,A2
12	AUSTIN STRAIT	A1,A2
13	INTERVIEW ISLAND WS	A1,A2
14	LANDFALL ISLAND WS	A1,A2
15	MOUNT HARRIETT NP	A1,A2
16	NARCONDAM ISLAND WS	A1,A2
17	NORTH REEF ISLAND WS	A1,A2
18	SADDLE PEAK NP	A1,A2
19	MAHATMA GANDHI MARINE NP	A1,A2
	ANDHRA PRADESH	
20	HORSELY HILLS	A1,A2
21	GUDUR TANK	A1
22	GODAVARI ESTUARY	A1
23	KRISHNA ESTUARY	
24	TELINEELAPURAM	A1,A2
25	UPALAPADU	A1
26	KOLLERU WS	A1
27	SRI LANKAMALLESWARA WS	A1,A2
28	NELLAPATTU WS	A1
29	PULICAT LAKE WS	A1
30	ROLLAPADU WS	A1,A2
31	SRI VENKATESWARA NP	A1,A2
32	VELLIKONDA WS	A1,A2
33	KAUNDINYA WS	A1,A2

Appendix VII Statewise List of Important Bird Areas identified.

(Draft list subject to change) **(contd.)**

Sr.No	SITE NAME	CRITERIA
	ARUNACHAL PRADESH	
34	NAMDAPHA NP & KAMLANG WS	A1, A2, A3
35	D'ERING WS & DIBANG WS	A1, A2, A3
36	TALLEY VALLEY WS	A1, A2
37	PAKHUI WS	A1, A2
38	SANGTI VALLEY	A1, A3
39	EAGLENEST WS & SEESA WS	A1, A2, A3
40	MEHAO WS	A1,A2
41	MOULING NP	A1, A2
42	DIBANG WS	A1, A2, A3
43	NAMTOK, NAMHEIK, NAMPONG, MANMAO	A1, A2
44	MANDLA PHUDUNG AREA	A1, A2
45	MAGO-THINGBU & LUGUTHANG AREA	A1, A2, A3
46	ZAMITHANG-NELYA-SAGESHWAR LAKE AREA	A1, A2, A3
47	THUNGRI CHANGLANG POSHINGLA, MAJI, BASTI	A1, A2
48	CHAYANG TAJO-KHENEWA LADA AREA	A1, A2
49	KOLORIANG-SARLI-DAMIN AREAS	A1, A2
50	NACHO-LIMEKING-TAKSING, MAJHA & NEIGHBOURING AREAS	A1, A2
51	TATO-MACHUKA-MONI GONG-GASHENG	A1, A2
52	SIRKUM PAHAR & NEIGHBOURING AREAS	A1, A2
53	MANDLA PHUDUNG AREA	A1, A2
54	DITCHU RESERVE FOREST	A1, A2
55	PARA-CHANGLAGAUM	A1, A2
56	NAMSANG MUKH-VODORIA	A1
	ASSAM	
57	JOYDIHING WS (PROPOSED)	
	(UPPER DIHING WEST BLOCK-JOYPUR-DIRAK)	A1, A2, A3 A4 iv
58	UPPER DIHING (EAST BLOCK)-KAKOJAN	
	RF-DIGBOI OIL FIELD AREA	A1,A2,A3
59	BURACHAPORI WS + LAOKHOWA WS	A1,A2
60	BUHRIDIHING	A1,A3
61	CHAKRASILA WS-DIPLAI-DIKRA BEEL COMPLEX-DHIR BEEL	A1,A2,A3
62	DOOM DOOMA-DANGORI RF	A1,A2,A3
63	DEEPAR BEEL WS	A1,A3,A4 (iii)
64	DIBRU-SAIKHOWA NP + KOBO CHAPORI + AMARPUR CHAPORI-MAGURI-MOTAPUNG BEELS	A1,A2

Appendix VII Statewise List of Important Bird Areas identified.

(Draft list subject to change) **(contd.)**

Sr.No	SITE NAME	CRITERIA
65	HAHKHATI RESERVE FOREST + KUMSONG RESERVE FOREST	A1,A3
66	JAMJING- SENGHJAN RESERVE FORESTS	A1,A3
67	JENGDIA BEEL	A1,A4(i)
68	KAZIRANGA NP	A1,A2
69	KOABARI DOLONI	A1,A3,A4(i)
70	TIRAP-PATKAI (SALIKI PRF-ADJACENT PRFS)	A1,A2,A3
71	MAJULI BEEL	A1,A2,A4(i)
72	MANAS NP	A1,A2,A3
73	MISAMARI BEEL-KOKLIAMUKH-LAOJAN-DALANI-KAWIMARI COMPLEX	A1
74	NAGAON	A1
75	NAMERI NP	A1,A2
76	BARAIL RANGE-NORTH CACHAR RF	A1,A2
77	ORANG NP	A1,A2
78	PANIDIHING BIRD SANCTUARY-PHOKOLAI BEEL	A1,A2,A3 A4(iii)
79	POBITARA WS	A1,A2,A3 A4(iii)
80	SONAI-RUPA WS	A1
81	SIBSAGAR-JOYSAGAR-GOURI TANKS	A1
82	JATINGA	A1,A2
83	SON BEEL	A1
	BIHAR	
84	DANAPUR TANK	A1
85	KABAR LAKE WS	A1
86	KURSELA	A1
87	TAL WETLANDS	A4(iii)
88	VALMIKI NP + WS	A1
	CHHATTISGARH	
89	UDANTI & SITANADI WS	A1
90	GOMARDA WS	A1
91	INDRAVATI NP	A1
92	BARNAWAPARA WS	A1
	DELHI	
93	OKHLA BARRAGE	A1
	GOA	
94	ILHAS WETLANDS	A1
95	BHAGWAN MAHAVIR NP	A1,A2

Appendix VII Statewise List of Important Bird Areas identified.

(Draft list subject to change) **(contd.)**

Sr.No	SITE NAME	CRITERIA
96	COTIGAO WS	A1,A2
	GUJARAT	
97	BANNI GRASSLANDS + HANJ TAL + CHHARI DHAND	A1
98	FLAMINGO CITY	A1
99	WETLANDS OF KHEDA DISTRICT	A1
100	MAHI RIVER ESTUARY	A1
101	SALT PANS OF BHAVNAGAR	A1
102	PARIEHJ & KANEVAL RESERVOIRS	A1
103	LALA GREAT INDIAN BUSTARD WS	A1
104	RUDRAMATA DAM	A1
105	LUNA JHEEL	A1
106	GIR NP + WS	A1
107	KHIJADIA WS	A1
108	MARINE NP + WS (GULF OF KACHCHH)	A1
109	NALSAROVAR WS	A1
110	THOL LAKE WS	A1
111	VELAVADAR NP	A1
112	WILD ASS WS	A1
	HIMACHAL PRADESH	
113	DALLI (SOUTH)	A1,A2
114	CHAIL WS	A1,A2
115	DARANGHATI WS	A1,A2
116	GAMGUL SIAHBEHI WS	A1,A2
117	GREAT HIMALAYAN NP	A1,A2
118	KAIS WS	A1,A2
119	KANAWAR WS	A1,A2
120	KUGTI WS	A1,A2
121	RUPI BHABA WS	A1,A2
122	TIRTHAN WS	A1,A2
	HARYANA	
123	SULTANPUR NP	A1,A2
124	KALESAR WS	A3
125	BASAI WETLANDS	A4(iii)
126	WETLANDS OF YAMUNA	A4(iii)
127	BHINDAWAS WS	

Appendix VII Statewise List of Important Bird Areas identified.

(Draft list subject to change) **(contd.)**

Sr.No	SITE NAME	CRITERIA
	JAMMU & KASHMIR	
128	TSO MORARI LAKE & ADJACENT MARSHES	A1
129	CHUSHUL MARSHES	A1
130	MIRGUND JHEEL & RESERVE	A1
131	WULAR LAKE	A1
132	LOLAB VALLEY	A1,A2
133	DACHIGAM NP	A1
134	HEMIS NP	A1
135	KISHTWAR NP	A1
136	OVERA WS	A1,A2
137	HANLE SHADO-BUG	
138	LIMBAR WS	A1,A2
	JHARKHAND	
139	PALAMAU WS	A1
140	UDHWA LAKE WS	A1
	KARNATAKA	
141	BANNERGHATTA NP	A1,A2,A3
142	BHADRA WS	A1,A2,A3
143	BILIGIRIRANGA TEMPLE WLS+BILGIRI RANGASWAMI HILLS	A1,A2,A3
144	CAUVERY WS	A1,A2,A3
145	DANDELI WS	A1,A2,A3
146	HAMPI RUINS	A1,A2
147	KOKKARE BELLUR	A1,A4I (i)
148	NANDI HILLS	A1,A2,A3
149	RAMANAGARA STATE FOREST	A1,A2,A3
150	RANEBENNUR BLACKBUCK SANCTUARY	A1
151	RANGANATHITOO WS	A1,A3
	KERALA	
152	AMARAMBALAM RESERVE FOREST-NILAMBUR	A1,A2,A3
153	ARALAM WS	A1,A2
154	CARDAMOM HILLS	A1,A2
155	CHINNAR WS	A1,A2,A3
156	ERAVIKULAM NP	A1,A2,A3
157	IDUKKI WS	A1,A2
158	KOLE	A1
159	NELLIYAMPATHY RESERVE FOREST	A1,A2,A3

Appendix VIII Statewise List of Important Bird Areas identified.

(Draft list subject to change) **(contd.)**

Sr.No	SITE NAME & (STATE)	CRITERIA
160	PARAMBIKULAM WS	A1,A2,A3
161	PEECHI-VAZHANI	A1;A2,A3
162	PERIYAR TIGER RESERVE	A1,A2,A3
163	SILENT VALLEY NP	A1,A2,A3
164	THATTAKKAD BIRD SANCTUARY	A1,A2,A3
165	THIRUNELLI (PART OF WYNAAD SANCTUARY)	A1,A2,A3
166	VAZHACHAL-SHOLAYAR	A1,A2,A3
167	WYNAAD WS	A1,A2,A3
	LAKSHADWEEP	
168	PITTI WS	A4 (iii)
	MAHARASHTRA	
169	NAGZIRA WS	A3
170	NANNAJ PLOTS	A1
171	THANE CREEK	
172	TORANMAL RESERVE FOREST	A1
173	SINHGAD (NORTH WESTERN GHATS)	A1,A2
174	TALODA RESERVE FOREST	A1
175	OZAR & ADJOINING GRASSLANDS	A1
176	GANGAPUR DAM & GRASSLANDS	A1
177	MALSHEJ	A1
178	BHIMASHANKAR WS	A1
179	JAIKWADI WS	A1
180	MELGHAT WS	A1
181	NANDUR WS	A1
182	NAWEGAON NP	A1
183	SANJAY GANDHI NP	A1,A2
184	TADOBA NP	A1
	MADHYA PRADESH	
185	BANDHAVGARH NP	A1
186	DIHAILA JHEEL	A1, A4(iii)
187	KANHA NP	A1
188	MADHAV NP	A
189	PANNA NP	A1
190	PENCH NP	A1
191	NATIONAL CHAMBAL WS	A1
192	SARDARPUR WS	A1

Appendix VII Statewise List of Important Bird Areas identified.

(Draft list subject to change) **(contd.)**

Sr.No	SITE NAME	CRITERIA
193	BORI WS & SATPURA NP	A1
194	SON GHARIAL SANCTUARY	A1
195	KHAKNAAR FOREST RANGE	A1
	MANIPUR	
196	ANGO HILLS	A1
197	DZUKO NP	A1,A2
198	DZUKO WS	A1,A2
199	KAILAM WS	A1
200	LOKTAK LAKE & KEIBUL-LAMJAO NP	A1
201	SIROI NP	A1,A2
202	SIROI WS	A1,A2
203	YANGOUPOKPI-LOKCHAO WS	A1
204	BUNNING WS	A1
	MEGHALAYA	
206	BALPAKRAM NATIONAL PARK + SIJU WS	A1,A2,A3
209	NOKREK RIDGE NP	DD
211	NONGKHYLLERN WS	DD
	MIZORAM	
215	DAMPA WS	
216	MURLEN NP	A1,A2
217	NGENGPUI WS	A1,A2
218	PHAWNGPUI WS	A1,A2
219	DAMPA NP	A1,A2
220	DAMPA WS	A1,A2
221	LENGTENG WS	
222	TAWI WS	
	NAGALAND	
223	SATOI RANGE	
224	KHONOMA NATURE CONSERVATION & TRAGOPAN SANCTUARY	
225	DZUKO-JAPFU-PULIEBADZE WS	
226	FAKIM WS	
227	INTANKI NP	
228	SHARAMATI WS	
	NICOBAR ISLANDS	
229	CAR NICOBAR	A1,A2
230	TILANGCHONG, CAMORTA, KATCHAL, NANCOWRY,TRINKAT	A1,A2

Appendix VII Statewise List of Important Bird Areas identified.

(Draft list subject to change) **(contd.)**

Sr.No	SITE NAME	CRITERIA
231	GREAT NICOBAR, LITTLE NICOBAR	A1,A2
	ORISSA	
232	BHITARKANIKA WS	A1,A3
233	CHANDKA WS	A1,A3
234	CHILKA LAKE	A1,A3
235	SUNABEDA WLS	A1
236	SATKOSIA GORGE WS	A1,A3
237	SIMLIPAL NP	A1,A3
	PUNJAB	
238	SHIWALIK HILLS	
239	HARIKE WS	
	RAJASTHAN	
240	AJAN BANDH [PART OF KEOLADEO NP]	A1,A3
241	BAJRANGADH	A1,A3
242	BUND BARETHA WS	A1,A3
243	DESERT NP + KHURI AND TEJSI	A1,A3
244	DILWARA TO ACHALGARH	A1,A3
245	DIYATRA	A1,A3
246	GAGWANA, ARAIN, MANGALIYAWAS, RAMSAR, GOYAL,	
	RATAKOT AND BANDAR	A1,A3,A42 (ii)
247	KEOLADEO NP	A1,A3,A4 (i), A4(iii)
248	RANTHAMBORE TIGER RESERVE	A1,A3
249	SAMBHAR LAKE	A1,A3
250	SARISKA NP	A1,A3
251	SONKHILYA	A1,A3
	SIKKIM	
252	CHHO LHAMO PLATEAU	A1
253	LOHONAK VALLEY	A1
254	LACHUNG, LEMA & DOMBANG VALLEY	A1
255	LOWLAND FOREST TO (MELLI, KERABARI, BAGUWA, JORETHANG	A1,A2
256	RONGLI	
257	KYONGNOSLA ALPINE WS	A1
258	MAENAM WS	A1,A2
259	SHINGBA (RHODODENDRON) WS	
260	BARSEY RHODODENDRON WS	A1
261	FAMBONG LHO WS	A1

Appendix VII Statewise List of Important Bird Areas identified.

(Draft list subject to change) **(contd.)**

Sr.No	SITE NAME	CRITERIA
	TAMIL NADU	
262	AVALANCHE (NILGIRI)	A1,A2
263	BERIJAM (KODAIKANAL)	A1,A2
264	BIG TANK	A1
265	BISON SWAMP (NILGIRI)	A1,A2
266	CAIRNHILL RESERVE FOREST (NILGIRI)	A1,A2
267	COONOOR (NILGIRI)	A1,A2
268	GOVERNOR'S SHOLA (NILGIRI)	A1,A2
269	GRASS HILLS	A1,A2
270	GULF OF MANNAR (MANDAPAM & GROUP OF ISLANDS)	A1
271	KALAKKAD WS	A1,A2
272	KODAIKANAL, PALNI HILLS+KUKAL (KODAIKANAL)	A1,A2
273	KODANAD (NILGIRI)	A1,A2
274	KOLLI HILLS (EASTERN GHATS)	A1,A2
275	KOTHAGIRI, LONGWOOD SHOLA (NILGIRI)	A1,A2
276	MOIR POINT	A1,A2
277	MUDUMALAI WS	A1
278	MUTHUKUZHI	A1,A2
279	NADUVATTAM	A1,A2
280	POINT CALIMERE WS	A1,A4(i), A4(iii)
281	POOMPARAI(POOMBARAI) [KODAIKANAL]	A1,A2
282	SIRUVANI FOOTHILLS	A1,A2
283	SUCHINDRAM THERUR	A1
284	THALAKUNDAH	A1,A2
285	VEDANTHANGAL BIRD SANCTUARY	A1
286	PULICAT LAKE	A1,A4(i), A4(iii)
	TRIPURA	
287	GUMTI WS	DD
288	SEPAHIJALA WS	DD
289	TRISHNA WS	DD
	UTTAR PRADESH	
290	DUDWA NP	A1
291	HASTINAPUR WS	A1,A3
292	KATERNIA-GHAT WS	A1
293	KISHANPUR WS	A1
294	LAGGA-BAGGA RESERVE FOREST	A1

Appendix VII Statewise List of Important Bird Areas identified.

(Draft list subject to change) **(contd.)**

Sr.No	SITE NAME	CRITERIA
295	LAKHBAHOSI BIRD SANCTUARY	A1
296	NATIONAL CHAMBAL WS	A1
297	NAWABGANJ BIRD SANCTUARY	A1,A4(iii)
298	PATNA BIRD SANCTUARY	A1,A4(iii)
299	SAMASTIPUR BIRD SANCTUARY	A1,A4(iii)
300	SHEIKHA JHEEL	A1,A4(iii)
301	SITABANI-KALADHUNGI	A2
302	SUR SAROVAR BIRD SANTUARY	A1,A4(iii)
303	OKHLA WILDLIFE SANCTUARY	A1,A4(iii)
304	SANDI WS	DD
305	TIKRA JHEELS	A1,A4(iii)
306	SURHA TAL WS	DD
307	SOHELWA WS	DD
308	SOHANGIBARWA WS	A1
309	SITADWAR AND PYAGPUR JHEEL	A1,A4(iii)
310	SAMAN WS	A1,A4(iii)
311	PARVATI ARANGA WS	A1,A4(iii)
312	MAHAVIR SWAMI WS	DD
313	KURRA JHEEL	A1, A4(iii)
314	KAIMUR WS	DD
315	BAKHIRA WS	DD
316	TUMERIA BARRAGE (DAM)	A1,A2
	UTTARANCHAL	
317	ASAN BARAGE	A1,A3
318	BADRAJ, BINOG AND JHARIPANI WS	A1,A2
319	CORBETT TIGER RESERVE	A1
320	GOVIND WS KULNI & BALCHA FOREST	A1,A2
321	KEDARNATH WS	A1,A2
322	KHATI RESERVE AND WACCHUM	DD
	(NANDA DEVI BIOSPHERE RESERVE)	A1,A2
323	ASKOT (SOBLA) WS	A1,A2
324	BINSAR WLS	DD
325	RAJAJI NP	DD
326	SONANADI WLS	DD
327	VALLEY OF FLOWERS NP	DD

Appendix VII Statewise List of Important Bird Areas identified.

(Draft list subject to change) **(contd.)**

Sr.No	SITE NAME	CRITERIA
	WEST BENGAL	
328	BUXA TIGER RESERVE	A1
329	CHAPRAMARI WS	A1
330	GOPALDHARA	A1
331	GORUMARA NP	A1
332	JALPAIGURI TOWN	A1
333	LAVA/NEORA VALLEY NP	A1
334	SINGHALILA NP	A1
335	SUNDARBANS BIOSPHERE RESERVE NP	A1
336	MAHANANDA WS	A1
337	BALLAVPUR WS & SURROUNDING AREAS	A1
338	KULIK BIRD SANCTUARY	A4(iii)
339	JALDHAPARA WS	A1

Legend

A1 = Red Data Book Species
A2 = Restricted Range Species
A3 = Biome Restricted assemblages
A4 = Congregations
DD = Data Deficient
NP =National Park
WS =Wildlife Sanctuary
RF = Reserve Forest

APPENDIX II

Indian Red Data Book threatened bird species* (BirdLife International 2000)

SPECIES	ENGLISH	SPECIES	ENGLISH
1 *Pelecanus crispus*	Dalmatian Pelican	41 *Gallinago nemoricola*	Wood Snipe
2 *Pelecanus philippensis*	Spot-billed Pelican	42 *Tringa guttifer*	Spotted Greenshank
3 *Fregata andrewsi*	Christmas Island Frigatebird	43 *Eurynorhynchus pygmeus*	Spoon-billed Sandpiper
4 *Ardea insignis*	White-bellied Heron	44 *Rhinoptilus bitorquatus*	Jerdon's Courser
5 *Ciconia boyciana*	Oriental Stork	45 *Rynchops albicollis*	Indian Skimmer
6 *Leptoptilos javanicus*	Lesser Adjutant	46 *Columba eversmanni*	Eastern Stock Pigeon
7 *Leptoptilos dubius*	Greater Adjutant	47 *Columba elphinstonii*	Nilgiri Wood-pigeon
8 *Oxyura leucocephala*	White-headed Duck	48 *Columba punicea*	Purple Wood Pigeon
9 *Anser erythropus*	Lesser White-fronted Goose	49 *Otus alius*	Nicobar Scops-owl
10 *Cairina scutulata*	White-winged Duck	50 *Heteroglaux blewitti*	Forest Owlet
11 *Anas formosa*	Baikal Teal	51 *Apus acuticauda*	Khasi Hills Swift
12 *Marmaronetta angustirostris*	Marbled Teal	52 *Aceros nipalensis*	Rufous-necked Hornbill
13 *Rhodonessa caryophyllacea*	Pink-headed Duck	53 *Aceros narcondami*	Narcondam Hornbill
14 *Aythya baeri*	Baer's Pochard	54 *Pycnonotus xantholaemus*	Yellow-throated Bulbul
15 *Haliaeetus leucoryphus*	Pallas's Fish-eagle	55 *Hypsipetes nicobariensis*	Nicobar Bulbul
16 *Accipiter butleri*	Nicobar Sparrowhawk	56 *Turdus feae*	Grey-sided Thrush
17 *Aquila clanga*	Greater Spotted Eagle	57 *Brachypteryx hyperythra*	Rusty-bellied Shortwing
18 *Aquila heliaca*	Eastern Imperial Eagle	58 *Brachypteryx major*	White-bellied Shortwing
19 *Falco naumanni*	Lesser Kestrel	59 *Saxicola macrorhyncha*	Stoliczka's Bushchat
20 *Megapodius nicobariensis*	Nicobar Megapode	60 *Saxicola insignis*	Hodgson's Bushchat
21 *Francolinus gularis*	Swamp Francolin	61 *Garrulax cachinnans*	Rufous-breasted Laughingthr
22 *Perdicula manipurensis*	Manipur Bush-quail	62 *Pellorneum palustre*	Marsh Babbler
23 *Arborophila mandellii*	Chestnut-breasted Partridge	63 *Spelaeornis badeigularis*	Mishmi Wren-Babbler
24 *Ophrysia superciliosa*	Himalayan Quail	64 *Spelaeornis longicaudatus*	Tawny-breasted Wren-babbler
25 *Tragopan melanocephalus*	Western Tragopan	65 *Stachyris oglei*	Snowy-throated Babbler
26 *Tragopan blythii*	Blyth's Tragopan	66 *Chrysomma altirostre*	Jerdon's Babbler
27 *Lophophorus sclateri*	Sclater's Monal	67 *Turdoides longirostris*	Slender-billed Babbler
28 *Catreus wallichi*	Cheer Pheasant	68 *Paradoxornis flavirostris*	Black-breasted Parrotbill
29 *Syrmaticus humiae*	Mrs. Mrs. Hume's Pheasant	69 *Prinia cinereocapilla*	Grey-crowned Prinia
30 *Pavo muticus*	Green Peafowl	70 *Chaetornis striatus*	Bristled Grass-Warbler
31 *Grus leucogeranus*	Siberian Crane	71 *Schoenicola platyura*	Broad-tailed Grassbird
32 *Grus monacha*	Hooded Crane	72 *Ficedula subrubra*	Kashmir Flycatcher
33 *Grus nigricollis*	Black-necked Crane	73 *Parus nuchalis*	Pied Tit
34 *Grus antigone*	Sarus Crane	74 *Sitta formosa*	Beautiful Nuthatch
35 *Rallina canningi*	Andaman Crake	75 *Amandava formosa*	Green Munia
36 *Heliopais personata*	Masked Finfoot	76 *Ploceus megarhynchus*	Finn's Weaver
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Sypheotides indica	Lesser Florican	79 *Gyps tenuirostris*	Slender-billed Vulture**
40 *Vanellus gregarius*	Sociable Lapwing		

*Species listed ad Critical (CR), Endangered (EN), Vulnerable (VU), Data Deficient (DD) or Conservation Dependent (CD) in the Asian Red Data Book. Near Threatened (NT) species have not been included.

* *The taxons of Indian Vulture *(Gyps indicus)* and Slender-billed Vulture*(Gyps tenurostris)* were initially described a separate species but have been treated as subspecies and known as Long-billed Vulture *(Gyps indicus)* since the early twentieth century. Recent studies have shown that the two forms are distinct species that are not even each other's closest relatives (BirdLife International 2001).

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